

connection with the services rendered to Pennsylvania Power and Light Company under contracts identified as 76 and 77, such services being rendered jointly by Safe Harbor and Penn Water.

Q. Any others? A. Not of any material nature that I think of at the moment.

Q. What facilities did you have reference to in connection with Exhibits 76 and 77 which Safe Harbor has installed for purposes of that agreement? A. Consisting largely of 66 K. V. switching equipment and oil circuit breaker, disconnect switches and the like; also the control equipment including relays, meters and the like required in connection with the operation of the transmission system of Penn Water under the exhibits identified as [2520] 76 and 77.

Q. Is it your statement that the equipment you have described in connection with Exhibits 76 and 77 were not installed by Safe Harbor until Exhibit 76 was consummated? The date of the agreement is May 1, 1933, for your information. A. I think that is correct.

Q. Is there any provision in that agreement for the installation of the equipment you have described by Safe Harbor? A. Which agreement are you referring to?

Q. Exhibit 76. A. I don't think they are set out specifically there.

Q. Can you point out where there are any references made to them? A. May I see Exhibit 77, please?

Q. Yes. A. Article Roman numeral III of Exhibit 76, Section 4, "All power and energy delivered hereunder shall be metered at or in cases not practicable shall be corrected to the low tension terminals of the stepdown transformers at Engleside Substation. Necessary billing meters shall be installed and maintained by and at the expense of Generating Companies."

Q. Stopping right there—

MR. MYSE: May he finish his answer, Mr. Goldberg?

THE WITNESS: I have not looked further.

[2521] By MR. GOLDBERG:

Q. Go ahead and look further. A. I think I referred yesterday to Article Roman numeral VIII of Exhibit 76 relating to the interconnection and parallel operation, in which reference is made to "arrangements for an equitable division of the cost of any changes in or additions to the facilities or equipment of either party necessary to accomplish these results."

By "these results" reference is made to interconnection and parallel operation of the Lancaster division of P. P. and L. with its other divisions.

Then as respects Exhibit 77 reference is made in paragraph Arabic 7, "Manor Substation and Transmission Line." It there provides that "On or before November 1, 1941, (unless development of a new type of circuit breaker will require a longer time in which event a date not later than May 1, 1943, shall be agreed upon between the parties) Generating Companies will construct and thereafter will operate and maintain at a location near the Safe Harbor plant, a high tension bus and switching station (to be known as Manor Substation) shown schematically on attached diagram Exhibit —M—."

I will not read any more unless it becomes necessary.

Q. I want you to look through the entire agreement and point out everything in that connection because I propose [2522] asking you some more questions about it. A. Perhaps I should stop here and refer to this paragraph because the dates I have mentioned for having Manor Substation available, of course, are behind us.

Q. And it is not available? A. It is not yet available but other facilities have been provided in lieu of it which I want to refer to.

Q. All right. A. Letters were exchanged between Safe Harbor on the one hand and Pennsylvania Power and Light on the other, agreeing that the installation of Manor Substation as herein proposed might be deferred.

Q. Was that letter solely between Safe Harbor on the one hand and Pennsylvania Power and Light on the other?

A. That is my recollection. Safe Harbor at that time was writing to explain why certain facilities were not available, but I believe that although it was written by Safe Harbor reference was made to the fact that it was writing for both parties.

Q. Will you check that? I would like to know who wrote the letter. A. Yes, sir.

Q. If you can find a copy of it bring it in to the hearing room with you. A. Yes, sir.

[2523] Although the substation installation was not completed on the dates herein specified, Pennsylvania Power and Light came to Penn Water and Safe Harbor in about 1942 for the purpose of discussing the service problems arising because Manor Substation had not been built.

The outgrowth of those discussions was that Safe Harbor installed a 66 K. V. oil circuit breaker on the intake deck of the power house together with 66 K. V. buses and disconnect switches, including of course, control, metering and relaying equipment.

The purpose of this oil circuit breaker was to tie electrically together the 66 K. V. circuits of Safe Harbor known as 692 and 693 in order to equalize the loading on these two circuits which had become unbalanced due to the increasing amounts of power and energy flowing at times north and at times south on the 66 K. V. line of Pennsylvania Power and Light between its Harrisburg Substation and the Manor Substation of Penn Water.

It was further understood, and I believe in writing, that the installation of this 66 K. V. oil circuit breaker and related equipment was not considered a substitute for Manor Substation but would defer Manor Substation until such times as the parties found that the Manor Substation facilities were required to provide the reliability of service to which both companies agreed was desirable and necessary.

[2524] Q. You say that you made reference to another letter. Is that another letter or the same letter? A. No, it would be another letter if it is in writing. I am not

sure whether or not it is in writing. My recollection is that it was.

Q. Will you check that and bring a copy of that along with you? A. I will.

Under paragraph 8, "Method of operation", reference is made to certain metering facilities that would be provided by Generating Companies to permit the control or regulation of the amounts of power and energy otherwise referred to.

Then paragraph 14, "Joint use of transmission facilities", which we referred to yesterday, which involves in part the joint use of Safe Harbor's facilities.

Q. Those transmission facilities of Safe Harbor that you described yesterday in connection with paragraph 14 of Exhibit 77, are we to understand that those facilities would not have been installed if Exhibit 77 had not been consummated? A. No, I didn't intend to give that impression.

There may be other references or implications that I didn't notice as I read through the two contracts.

Q. Now with respect to Articles III and VIII of Exhibit 76, were the facilities which you described as having been installed by Safe Harbor in connection with Exhibits 76 and 77 [2525] installed pursuant to Articles III and VIII of Exhibit 76? I have reference to your description of 66 K. V. switching equipment and oil circuit breaker, disconnect switches, control equipment including relays and meters and the like, in connection with the operation of the transmission system of Penn Water under Exhibits 76 and 77. A. Most of the facilities that I referred to, or at least that portion of the facilities I referred to as being installed on the intake deck of Safe Harbor, were installed in lieu of Manor Substation covered by paragraph Arabic 7 of Exhibit 77.

Q. Let me see if I—— A. The other facilities, the controls, meters, etc., were in part provided for Penn Water in connection with the flow of electric services between the

hydro developments of Safe Harbor and Penn. Water, and would have been provided irrespective of Exhibits 76 and 77, but others were provided in order to carry out the intent and purpose, and specifically for that intent and purpose, of Exhibits 76 and 77.

[2530] MR. GOLDBERG: Yes. I want you to define electric operations and then electric services and tell me what is the difference between the two.

THE WITNESS: Electric services, as Mr. Walls has used [2531] that term and as I have referred to it yesterday, include each and all of the attributes referred to by Mr. Walls and which we discussed a few minutes ago. It may be necessary, and in most cases it is necessary, to provide special facilities of a transmission nature in order that the electric services may be rendered, and, of course, as we are using it here such electric services are rendered under contracts, most of which have been identified in these proceedings.

There are also other special facilities from time to time provided by Penn Water and referred to in my direct testimony that had no relation to the supply of electric services by Penn Water and Safe Harbor, and a specific example of that is the 110 k. v. transmission line constructed by S. T. Co. of Maryland, a subsidiary of Penn Water, between the Philadelphia road substation of Baltimore Company and a second transmission and distribution substation of Baltimore Company in Baltimore County, I believe known as the Gunpowder switching station.

Such transmission facilities were provided for the sole and exclusive use of Baltimore Company and have no relation to, nor are they involved in, the rendering of electric services with its attributes which we have been discussing.

Q. What is electric operations? A. Of what?

Q. You said there is a difference between electric operations and electric services. Define electric operations.
[2532] A. Electric operations would include the supply or

rendering of electric service, the operating of the special facilities provided for the exclusive or joint use of one or more of the customers, together with the operations of the general facilities of Penn Water and Safe Harbor, including the generators, turbines, the concatenated group of facilities within the powerhouse referred to by Mr. Walls, and its many auxiliaries.

Q. So that when you speak of electric services you have in mind the attributes of the electric service which you and Mr. Walls have mentioned in this proceeding. But when you speak of electric operations you have in mind the physical operations of the facilities which are utilized in rendering the electric service. Is that it? A. That is correct.

Q. Now, when you mentioned other special facilities in connection with your definition of electric services you said, if I recall correctly, that such facilities have no relation to the supply of electric services. Do I understand by your statement "have no relation" you had in mind that you do not conceive of such facilities as attributes of electric service? A. I am lost. I will have to have it read back.

(Question read.)

THE WITNESS: I would like to have that clarified, if I may, use of "other special facilities."

[2533] Q. You said, "Of the 110 k. v. line of S. T. Co."

A. Yes. Under the contract identified as "H" and "I", and by agreement of the parties, Penn Water through its subsidiary, S. T. Co. of Maryland, provided certain 110 k. v. transmission facilities. Those electric facilities are not required nor used in the supply of electric services by Penn Water to Baltimore, and the electric services would be just as complete in every respect whether the Gunpowder line had been provided or not.

Q. In other words, you do not conceive of the Gunpowder line as an attribute of the electric service being rendered? A. I do not conceive of any facility being

an attribute of electric service, nor do I conceive that this Gunpowder line is a required, necessary or useful electric facility in connection with the rendering of electric services by Penn Water to Baltimore.

Q. By that statement, however, you are not passing on the question of whether the facilities are to be included in the rate base? A. No. We were talking about operations.

. . .

[2536] Q. Do you know that any rendering of electric services to Penn Water by Safe Harbor are made under Items "E", "F" and "G"? A. That is right, any that are made are made under "E", "F" and "G".

Q. And that is the fact without regard to Exhibits 76 and 77. Isn't that so? A. The fact that what services are rendered are rendered under "E", "F" and "G".

Q. That is right? A. That is true.

Q. And that would continue even if Safe Harbor were not a named party in Exhibits 76 and 77. Isn't that so? A. The fact that all services rendered to Penn Water are rendered by Safe Harbor under Items "E", "F" and "G".

Q. Yes. A. That is right.

Q. And isn't it those services rendered under Items "E", "F" and "G" which Penn Water relies on in part to meet the requirements of Philadelphia Electric, Pennsylvania Power and [2537] Light Company, and Metropolitan Edison Company?

. . .

A. . . . If I understand your question the answer is "yes." I want to be sure that I do. The services, the electric services, rendered by Safe Harbor to Penn Water may be used by Penn Water together with its own electric services to meet whatever obligations Penn Water has toward the service requirements of its customers, meaning Metropolitan Edison, Pennsylvania Power and Light, Philadelphia Electric Company at Coatesville, and the

Pennsylvania Railroad, and Baltimore Company.

Q. Now, in view of that fact does it not follow that even if Safe Harbor would not be a named party under Exhibits 76 and 77 the electric operations of Safe Harbor in rendering electric service to Penn Water and Consolidated would have been unaltered?

. . .

[2538] THE WITNESS: No, I think they would have been materially altered.

. . .

[2539] Q. All right, now. If its one-third entitlement under Items "E", "F" and "G" were all that were required by Holtwood to meet the requirements of Pennsylvania Power and Light Company, it was able to do so when Safe Harbor was named and it is still able to do so when Safe Harbor is not named. Is that right? A. Perhaps.

Q. Why is there any "perhaps" about it? A. I don't understand for certain just what your premise is, but I think it may be.

Q. Well, I want to be absolutely certain that you understand.

[2540] If, to meet the requirements of Pennsylvania Power and Light Company when Safe Harbor was a party to Exhibits 76 and 77, Penn Water was able to meet it by reason of the receipt of electric energy it is entitled to receive under Items "E", "F", and "G" from Safe Harbor, it will still be able to meet it by reason of that entitlement under Items "E", "F" and "G", even if Safe Harbor were to be removed from that agreement? A. Well, under the first instance when Safe Harbor and Penn Water render service jointly to Pennsylvania Power and Light Company, and to use your example of a million kilowatt hours I believe it was, I don't know what portion of that million kilowatt hours was rendered by Penn Water and what portion was rendered by Safe Harbor under contracts identified as Exhibits 76 and 77. But whatever amount Safe Harbor may have rendered to Pennsylvania Power and

Light Company, when Safe Harbor is removed Safe Harbor must increase the services rendered to Penn Water by that amount in order that Penn Water may meet the full obligations now of the million kilowatt hours to Pennsylvania Power and Light under Exhibits 76 and 77.

. . .

[2542] Q. Penn Water is obligated to serve Pennsylvania Power and Light, isn't it? A. Jointly with Safe Harbor.

Q. When Safe Harbor can't serve it does Penn Water just turn its back on its obligation?

. . .

A. Penn Water and Safe Harbor have a joint obligation. If Safe Harbor at any one time does not have any electric services available, then Penn Water must supply them itself.

Q. And it would supply it at least in part? A. What?

Q. It would supply it at least in part? [2543] A. When?

Q. Through this drawing under Items E, F, and G. Right? A. Entitlements have no relation to the services rendered. I thought we cleared that up last night.

. . .

Q. Now, then, if Holtwood received its one-third—
A. If Holtwood did receive one-third of the electric services?

Q. Yes. A. As specified by the entitlement?

Q. Yes, it would use that one-third to meet its obligations to Pennsylvania Power and Light Company under Exhibits 76 and 77. Right? A. And all of its other obligations; yes.

Q. And if the one-third was not sufficient to enable it to meet its other obligations it would try to meet it through generation at its steam electric and hydroelectric plants and perhaps through backfeed from Consolidated. Right? A. Or from its other Pennsylvania customers, yes.

[2544] Q. And that is the fact even if Safe Harbor is not named in Exhibits 76 and 77? A. That is right.

. . .

Q. Aren't the electric operations under Exhibit 72 today of Safe Harbor the same as they were under Exhibit 71? A. But under 72 those electric—you said electric operations?

Q. Electric operations? A. Electric operations are quite different under 72 than under 71.

[2546] Q. Go ahead. A. Because of the very nature of the two contracts. They require quite different operations. Procedures, the methods are the same, but the operations are different.

Q. What do you mean by "procedures and methods"? A. Well, the fact that they operate the plant today is the same as it was before but the way the plant is operated, the way Safe Harbor is operated today, is different from the way it was operated before as respects the contracts for power supply to the York area.

Q. What are the differences? How was it operated under Exhibit 71 and how is it operated today? A. Under Exhibit 71 Safe Harbor and Holtwood and the other facilities were operated in a manner to provide the electric services required equal to forty per cent each hour in the year of the service requirements, electric service requirements, of the Edison Light and Power Company of York.

Under Exhibit 72 the electric services rendered to the York area are no longer a flat and constant percentage of the electric service requirements of the York area but vary generally in proportion to the river flow.

. . .

[2547] Q. And that is what changes have taken place in the electric operations of Safe Harbor other than the generation of quantity that you have mentioned in the rendering of service under Exhibit 72 as distinguished from the rendering of service under Exhibit 71? A. Rendering of electric service?

Q. Yes. A. Under Exhibit 71 Safe Harbor rendered electric services to Edison Light and Power Company jointly with Penn Water.

Under Exhibit 72 Safe Harbor Water Power Corporation does not render any electric service to Metropolitan Edison Company, but rather, in part at least, to Pennsylvania Water and Power Company.

Q. Has that affected the electric operations of Safe Harbor other than the quantity of generation required?

A. The operating responsibilities have changed but the actual rendering of service in the way I understand you to mean, that the methods of operations, procedures of operations have not changed on the part of Safe Harbor Company, but the operating responsibilities have changed.

[2548] Q. By "operating responsibilities" you have reference to the responsibilities of Safe Harbor under provisions of Exhibit 71 and the provisions of Exhibit 72. Is that right? A. I do.

Q. You have reference to contractual responsibilities. Is that right? A. That is right.

Q. You mentioned certain facilities installed by Safe Harbor in connection with electric energy that is ultimately delivered to the Pennsylvania Railroad Company. Among other things named was the frequency changer unit for conversion of 3-phase, 60-cycle energy to 25-cycle single phase, and the cable system and other things you mentioned. Would those facilities have been installed by Safe Harbor if there were no requirements of delivery of electric energy to Pennsylvania Railroad? A. I don't know.

Q. You do know, however, that Safe Harbor installed them by reason of the requirements of delivering electric energy to Pennsylvania Railroad at certain characteristics. [2549] Is that right? A. That is right.

Q. Can you point to the provisions of any contract that has been identified or received in evidence in this proceeding whereunder those installations were made by Safe Harbor?

THE WITNESS: May I have that question read?
(Question read.)

THE WITNESS: What do you mean by "whereunder"?

By MR. GOLDBERG:

Q. You have Exhibits 76 and 77? **A.** Yes, I can do that from the Pennsylvania Railroad contract, which is Exhibit 101

MR. SPARKS: Yes. Here it is.

THE WITNESS: I am referring to Exhibit No. 10, being the composite form of the several contracts with the Pennsylvania Railroad Company for the supply of electric service to the Pennsylvania Railroad by the "Supplying companies", which refer to the Pennsylvania Water and Power Company, Safe Harbor Water Power Corporation, the Consolidated Gas Electric Light and Power Company, and the Potomac Electric Power Company, and passing over the several preambles to the original contract which do refer to services and special facilities Article II, Section 2, states in part, "Electric Companies shall supply such additional power and energy when called upon [2550] under this Section, under the terms and conditions of this contract, and such additional power and energy, which may be furnished in part by additional single phase hydro generation", which of course, was to be installed at Safe Harbor.

Article Roman numeral III, Facilities, "Facilities to be provided and points of Supply."

"Electric Companies shall install, operate and maintain all generating, transmission and switching equipment, except"—and then it refers to the 60 cycle 110 K. V. circuit to be provided by the railroad between a point south of Baltimore and the Benning plant of Potomac Electric Power Company.

It also refers in that Article to the fact that Electric companies shall install, operate and maintain "such special equipment and facilities provided for the use of and at the request of Railroad Company, as may be called for from

time to time under the provisions of Articles VIII and IX."

Article Roman IV, "Characteristics of Supply." It includes the provision that "The fields of the generators shall be designed and equipped with suitable voltage regulators", and so forth, indicating a characteristic of the facilities to be provided.

As I understand it, Mr. Goldberg, you want reference to the facilities provided by Safe Harbor.

[2551] By Mr. GOLDBERG:

Q. Safe Harbor, yes. A. Only?

Q. Yes. A. Article Roman VIII, "Annual charges for specified equipment and facilities." Therein Section 1 states: "At the written request of and upon reasonable notice by Railroad Company, Electric Companies shall install, operate and maintain single phase water wheel generators, converting equipment, cables, special 25-cycle bus for single phase supply to Railroad Company and switching equipment, step-up transformers and transmission lines under terms and conditions as herein specified. Railroad Company shall call on Electric Companies to provide additional single phase generating or converting capacity when the maximum"—and then it goes on to indicate conditions under which railroad may call for such additional capacity.

It also provides in that article that "Railroad Company shall endeavor to request the single phase waterwheel generators and transmission lines not less than eighteen (18) months, and other equipment and facilities not less than fifteen (15) months in advance of the date when such equipment shall be required."

That is not the whole of that section but enough to indicate the nature of railroad's request.

[2552] It further states in that article, "All such equipment shall be complete and adequate for the purpose intended regardless of whether all necessary details and parts are specifically mentioned in the tables."

I might mention that this article also refers to tables which are attached and made a part of that contract which

specify in more complete detail the special facilities to be provided thereunder.

Section 2 of Article VIII specifies the annual charges to be paid by the railroad on the equipment to be provided by the supplying companies which are referred to in two general sections.

The first section refers to the initial equipment, including reference to equipment to be installed at Safe Harbor, and at or near Benning, and the second section referring to the additional equipment to be provided as required.

The first item under this group includes the first additional 25,000 K. W. frequency changer set at Safe Harbor, and additional frequency changer sets at Safe Harbor in addition to the first addition.

I might say that the initial equipment to be provided, as I will refer to later, included one waterwheel generator to be installed in the Safe Harbor plant and one frequency changer to be installed at the Safe Harbor plant, and then specified payments were to be made for those facilities and [2553] others, and when additional facilities were to be provided specified payments were again stated in the contract subject to adjustment for commodity prices.

Reference is then made to an additional waterwheel generator, to additional switching facilities at Safe Harbor in the Conestoga Substation, and then in Section 5 of Article VIII it states the payments to be made to cover the first hydro unit at Safe Harbor, the first frequency changer unit, the 25-cycle single phase bus to be owned by Penn Water, the connecting cables between Safe Harbor plant and this substation bus, the step-up transformer substation, and the transmission line from Safe Harbor to Perryville.

Then in Section 8 of Article VIII it provides that at such time as the railroad company shall call on "Electric Companies" to provide an additional single phase capacity at Safe Harbor under the provisions of this Article VIII, the "Electric Companies" will have the option to provide

either an additional frequency changer or an additional water-wheel generator.

Then in article Roman numeral IX provision is made for "Electric Companies" to provide additional facilities not specified in the contract, and that the annual charges shall be a percentage of the cost of such facilities plus cost of operation and maintenance.

It also refers to certain joint use of facilities [2554] including communication and metering circuits, and I should add that special facilities have been provided by Safe Harbor and by Penn Water under the provisions of Article IX, and payments are being made currently in accord with such provisions.

Q. Which facilities are those? A. Facilities in Conestoga Substation owned and operated by Penn Water in part, and in part occupied by the Pennsylvania Railroad.

Certain facilities were provided with the extension of the railroad's electrification in Pennsylvania in 1937 and 1938.

Q. By Safe Harbor? A. Such facilities in part being provided by Penn Water and in part being provided by Safe Harbor.

Q. Is that part of this cable system which you mentioned? You mentioned provisions of cable systems by Safe Harbor. A. No, this is something else. When the railroad provided on its own behalf for certain transformers and high tension switching equipment, and it is quite an elaborate layout, the controls, including relays, meters, etc., were provided in the Safe Harbor plant control room for the operation of these railroad facilities. That involved certain cable facilities between the control point at Safe Harbor on [2555] the one hand and the switches, etc., in Conestoga Substation on the other, and Safe Harbor does own and operate such control cables and receives payment therefor in accordance with these pro-

visions, but they were not the cable systems referred to under preceding articles.

Although there are other minor references to facilities, coordinated uses, etc., I shall pass to the tables of the contract where a more specific description is given of the larger special facilities.

Table Roman I-A, covers the initial converting equipment at Benning and the initial generating and converting equipment at Safe Harbor, and it therein states that "Electric Companies will provide, operate and maintain in and adjacent to the Safe Harbor Hydro-Electric Plant at Safe Harbor, Pa., one—25-cycle waterwheel generator", with certain specified characteristics, and "cable connection between the 60-cycle side of this machine and the main station——"

I think I had better read in the entire part.

"Electric Companies will provide, operate and maintain in and adjacent to the Safe Harbor Hydro-Electric Plant at Safe Harbor, Pa., one—25-cycle waterwheel generator, 28,000 K. W., 80 per cent P. F." That means power factor—"single phase rating; one 60/25-cycle frequency changer, 25,000 K. W. 80 per cent P. F., single phase rating on 25-cycle side, with cable connection between the 60-cycle side of this machine and the main station 60-cycle bus; single [2556] phase cables together with oil circuit breakers, disconnecting switches, control and other appurtenant equipment for connecting both 25-cycle machines to a 13 K. W. outdoor, 25-cycle single phase bus located in a substation near the mouth of Conestoga Creek at an annual charge of"—and so on.

I might indicate there a moment which facilities were to be provided, were provided, irrespective of what may be said in here, what facilities were provided by Safe Harbor and what facilities were provided by Penn Water.

It states here the "Waterwheel generator and frequency changer unit were provided in or immediately ad-

jacent to the Safe Harbor hydro-electric plant", and were so provided by Safe Harbor.

Safe Harbor also provided the single phase cables, 25-cycle cables, between these machines and the 25-cycle railroad bus which was located in the Conestoga Substation of Penn Water.

The oil circuit breakers on that bus and the disconnecting switches were installed, owned and operated by Penn Water, but the controls for such facilities are again carried back to the main control room of Safe Harbor.

Then turning to Table II-A, initial substation at Safe Harbor, there again provision is made for this outdoor substation, 25-cycle single phase bus, etc., all of which was [2557] provided by Penn Water, but the controls, including certain relaying and metering equipment, were carried back to the control room at Safe Harbor.

TRIAL EXAMINER: What do you mean by "carried back"?

THE WITNESS: The operating mechanism for an oil circuit breaker for opening and closing the breaker is ordinarily located on the oil circuit breaker structure. The mechanism is electrically controlled. That control may be adjacent, or it may be a long distance away, sometimes miles away.

[2558] **TRIAL EXAMINER:** Were those controls controls which were already installed and in use by Safe Harbor or were they controls installed for this particular purpose?

THE WITNESS: They were installed for this particular purpose.

TRIAL EXAMINER: By Safe Harbor?

THE WITNESS: By Safe Harbor, that is the controls themselves, including the cable circuits from the equipment running back through the tunnel and the powerhouse to the control room.

TRIAL EXAMINER: All right.

Where is Conestoga Substation?

THE WITNESS: Conestoga Substation is adjacent to the Safe Harbor plant, and perhaps a quarter of a mile away from the nearest part of the plant, there is a hill intervening, and a tunnel has been drilled through that hill through which the power cables and control cables are run.

The substation itself lies on the bank of Conestoga Creek and is adjacent to, immediately adjacent to, the project boundary but outside of the project boundary of Safe Harbor.

TRIAL EXAMINER: You may continue.

THE WITNESS: Table III-A provides for additional converting equipment at Safe Harbor, none of which has as yet been requested by the railroad.

Table IV-A, additional water wheel generator at Safe [2559] Harbor covers the second water wheel generator which was requested by the railroad, or, rather, when the railroad requested additional capacity in accord with the provision I read a few moments ago Safe Harbor and the other electric companies had the option of installing either a second water wheel generator or a second frequency changer, and chose to install the water wheel generator under the provisions of Table IV-A. Those facilities were installed in 1941 or 1942.

Table V-A includes provisions for additional transformer and switching equipment at Safe Harbor. Again, a large amount of facilities have been installed and payments are being made under provisions of Article V-A. A portion of the investment is owned by Penn Water and a portion by Safe Harbor.

Table XI-A covers facilities for communication and in part for metering, and in part for supervisory control which involve controls, meters, and so forth, some of which, as

those tables clearly indicate, are located in the Safe Harbor control room, and some at other places.

. . .

[2560] Q. Are the facilities which are referred to in Item "G" as having been requested by Baltimore Company and Holtwood Company for installation by Safe Harbor pursuant to Article III of Item "E" covered in Exhibit 10?

A. Yes, they are. Do you want me to designate it?

Q. If you wish to designate it. It is not necessary.

A. Those facilities are specifically designated in Table IV-A.

Q. So that even though the facilities are designated in Exhibit 10, before the facilities were installed by Safe Harbor requests for their installation were made pursuant to the provisions of Item "E"? Right? A. No.

Q. Referring you to the second "whereas" clause of the first page of Item "G", doesn't that clearly show that Safe Harbor was requested by Baltimore Company and Holtwood Company to install additional machinery and equipment provided for in Exhibit 10 pursuant to Article III of Exhibit "E"? A. I don't read it that way, Mr. Goldberg.

Q. How do you read Article III of the Original Agreement, referred to on the first page of Exhibit "E"?

. . .

[2561] THE WITNESS: I understand this supplement agreement identified as Item "G" that we are referring to to provide for the entitlements of the services to be rendered in connection with a seventh water wheel generator known as No. 1 unit which was installed by Safe Harbor Company under the provisions of the railroad contract we have just been referring to as Exhibit No. 10.

By MR. GOLDBERG:

Q. Isn't it a fact that though the facilities you have just referred to are included in Exhibit 10, that nevertheless Penn Water and Consolidated, pursuant to Article III

of Item "E" in this proceeding, requested Safe Harbor to install those facilities? A. May I have that question read, please?

(Question read.)

THE WITNESS: No.

By MR. GOLDBERG:

Q. Now we agree, don't we, by referring to the second "whereas" clause of the first page of Item "G" that Baltimore Company and Holtwood Company requested Safe Harbor to install the facilities you have described to provide for increased power and energy requirements of Pennsylvania Railroad Company. Do [2562] we agree on that?

A. No.

Q. Do you agree that Baltimore Company and Holtwood Company are referred to in the second "whereas" clause on the first page of Item "G"? A. Their names appear there.

Q. Do you agree that it there states that Baltimore Company and Holtwood Company have requested Safe Harbor Company to install additional machinery and equipment in order to provide for increased power and energy requirements of the Pennsylvania Railroad Company? A. Those words appear in there.

[2563] Q. You agree that it says that? A. I agree the words you read are there.

Q. Do you agree it says that, Mr. Spaulding?

TRIAL EXAMINER: Answer the question yes or no.

MR. SPARKS: If Your Honor please, he said he agrees it appears in the document.

TRIAL EXAMINER: There seems to be some difference. The witness is making a difference in words.

MR. SPARKS: Apparently Mr. Goldberg is, too.

TRIAL EXAMINER: I am going to instruct the witness to give a categorical answer yes or no.

THE WITNESS: I would like to have the question again, please.

TRIAL EXAMINER: Very well.

(Question read.)

THE WITNESS: It so states.

By MR. GOLDBERG:

Q. And those facilities are described in Exhibit 10?

A. They are.

Q. And it also states on the first page of Item "G" in the second "whereas" clause that the request was made by Holtwood Company and Baltimore Company pursuant to Article III of "The Original Agreement." Is that right?

A. It so states.

Q. What is the Original Agreement? [2564] A. It states in the first "whereas" clause it is the agreement of June 1, 1931.

Q. That is Item "E" in this proceeding. Is that right?

A. Yes.

Q. So the reference is to Item "E"—right? A. It is.

[2572] Q. Nevertheless, Safe Harbor energy was still being utilized under Exhibit 71 as it had been under the Exhibit superseded by 71 to supply the requirements of Edison Light and Power Company?

[2573] A. Using "utilization" in the physical and operating sense and not the legal sense, because there may have been a legal change, and there certainly was a change in the operating obligations as a result of the contract identified as Exhibit 71, physical operations, and leaving out the additional interconnection path which was established at

about that time, the physical operations of Holtwood and Safe Harbor as respects its services to Edison Light and Power were not different except, perhaps, in magnitude and other characteristics of time and so on.

Q. In all my questions to you along these lines it has been my intention to confine myself to physical operations and not to worry about the legal implications of contractual provisions or the legal implications of including somebody's name in a contract. I have been a little bit concerned that where you have at first bluish disagreed with me you were thinking of legal implications. I want to disabuse your mind of that. A. I don't know whether I can entirely eliminate the terms of the contract, and again I am not speaking of the legal terms of the contract but the operating obligations of the contract.

Q. You mean your understanding of what the contract means from an engineering viewpoint? A. That is right.

[2574] They certainly were different under Exhibit 71 from what they were prior to that.

. . .

[2578] Q. When the flow of energy from Safe Harbor passes off Safe Harbor's facilities and on to the facilities of Penn Water, from then on Penn Water controls the flow of that energy. Is that right?

In the sense that Penn Water then owns and operates the facilities on which the electric energy flows. A. Penn Water owns and operates the facilities but one cannot, by holding up one's hand, control the flow of power.

Q. I realize that. In other words, neither can Safe Harbor do anything about it when that generator starts going, when the load is put on—right? A. Oh, yes. Safe Harbor in control of the generator can do just that.

Q. You mean it can stop the generator from generating? A. That is right.

Q. I didn't mean that. I mean when the load is on the generator starts generating, from then on Safe Harbor

cannot control the flow. Is that right? A. I am afraid that is not right because it is really Safe Harbor, through the control of its generator, together with the control of its railroad frequency changer used largely for the supply of electric services to Pennsylvania Railroad, is in perhaps the one position on the interconnected position where it can control the division of flow itself, [2579] under the instructions, of course, of the load dispatching office in Baltimore which again is jointly operated by, and the expenses are paid by, Holtwood and Safe Harbor, each paying one-half.

Q. But that control, if it exists at all, exists only so long as the energy remains on Safe Harbor's system—right? A. No, I cannot agree with that.

Q. When the energy passes off Safe Harbor's system on to the facilities of Penn Water is Safe Harbor then in a position to control the flow of that energy? A. I am afraid you are getting into a legal field rather than a technical field. Technically Safe Harbor is the one who can control it. Whether or not it flows over its own system, over the electric facilities of Penn Water, or of any one of the other interconnected electric systems, Safe Harbor can control the flow where perhaps the owner of those facilities cannot.

Q. Are you basing that last answer on any legal concepts? A. None at all.

Q. I want to stay with the technical aspects of it solely. I do not want to get into any legal aspects of it. A. That is the reason I have not agreed with you, because I am sticking to the technical aspects. I have [2580] endeavored to say I am not considering the legal aspects.

Q. You say that when the generation takes place at Safe Harbor and the flow of energy moves on to Holtwood's facilities, Safe Harbor still may control and can control the flow of that electric energy. Is that right? A. That is right, physically they can and do.

Q. How? A. I will endeavor to use a mechanical analogy.

Q. What is that? A. I will endeavor to use a mechanical or hydraulic analogy.

[2581] Q. All right. A. If we have a reservoir with three pipe lines leading to some three different basins, but we also have a pipe connection between two of those lines some distance from the reservoir, the operator of that reservoir is the only one who can control the flow of water in those pipes, including the lateral connections, unless someone may install a valve in one of those pipes where he shuts the water off.

Perhaps my analogy is none too perfect, because actually Holtwood is situated like the man with the valve except that Holtwood cannot, as my analogy might indicate, slow up or turn off only part of the water. Holtwood can only stop the flow of water by opening up or breaking the pipe. Holtwood is not in a position to open up the valve and thereby control the amount of flow in that pipeline.

Reverting to our actual physical operation: Safe Harbor, under normal conditions, has as was shown by Exhibit 8 in this proceeding very frequently the only or at least a portion of the spinning reserve capacity on the system, except perhaps in very high flow when all of its resources are being utilized. Therefore Safe Harbor is the logical operating plant to change its generation.

If at a given time there is a definite amount of power flow from Safe Harbor to Holtwood and, hence, to York, and at the same time there is a definite amount of power flow between Safe Harbor over the railroad circuits to Philadelphia, and thirdly, [2582] from Safe Harbor over the facilities of Pennsylvania Power and Light to Harrisburg, Safe Harbor has the greatest opportunity, and under normal operating conditions the only opportunity, of changing the flow of power on those three parallel paths to the northern system. By changing the total amount of generation they change not only the flow on all three of those paths simultaneously but having control as with a valve, being the railroad frequency changer at Safe Har-

bor, of the amount of flow over one of those they are therefore able largely to control the flow over all three of those parallel paths.

Q. As I understand it, the control extends to the amount and quantity? A. Oh, yes.

Q. That will pass on to those three lines radiating from Safe Harbor. Is that it? A. Yes.

Q. But once the quantity passes on to those three facilities and enters the system of Penn Water, Safe Harbor's control is at an end. Isn't that right? A. Physically?

Q. Yes. A. I don't see it.

Q. Take the analogy of the reservoir. The man at the reservoir can control the amount of water entering each of those paths. Right? [2583] A. That is right.

Q. That is where his control ends. Isn't that so? A. Technically that is not correct.

Q. Well, what other control does your man at the reservoir have? A. He doesn't need any other.

Q. Well, what else did he have aside from what he might need? He opens up the pipes and lets a certain amount of water go into each one of them? A. That is right.

Q. Then he closes the pipes. What other control does he have once he has done that? A. That is all. But that is all he needs to control the flow of power over these three parallel paths.

Q. Not at all. I think you said there was a connection between one of the lines radiating from the reservoir and another one some distance from that. Is that right? A. That is right.

Q. Now, then, that connection between lines A and B, shall we call them, presents another opportunity for altering the flows in lines A and B—right? A. No.

Q. Well, you can transfer a certain amount from A to B by reason of that connection or from B to A. Isn't that so? A. You can, but as long as the flow in the three paths [2584] are the same the flow in the lateral pipe is

going to be the same by the laws of nature, and other physical facts.

Q. Did you call it the basement? Did you say the basement? A. Basin.

Q. The connection of the basin to line B does not mean that that basin is going to receive all of the water that the man at the reservoir put into line B if part of that water is diverted from B over to A. Isn't that so? A. But who is going to divert it?

Q. Not the man at the reservoir—right? A. But the man at the reservoir is the only one who has any control over the amount.

Q. Let's hire somebody for the purpose of making use of that connection between A and B. A. Oh, if you change the size of the pipe, if you change the size of the outlet, you change the relations.

Q. What is the purpose of the connection with A and B if it is not for the purpose of diverting part from A to B or B to A as may be desired? A. That was not part of my assumption, as to what the purpose was. I was just saying they were there.

Q. But in your assumption you put in a connection between two of the radiating lines, and I have named them A and B. [2585] A. Yes.

Q. Having put that connection in there what did you put it in there for? A. Because it more readily simulates the many interconnecting lines that exist on the electric power system of Penn Water and Safe Harbor.

Q. And the interconnections are for the purpose of diverting the flows on to different lines as required? A. That is correct. Once the size of the transformers and the constants for circuits are fixed, the flow of the power on the three main lines and the radial line will not change unless another factor takes place we have not considered, unless the needs of the customers or persons at the three water basins at the end of the line should change. Then all the relations are changed.

Q. Holtwood under such circumstances might be in a position to bring about the changes but Safe Harbor would not be. Isn't that so? A. I don't agree with that. Changes might come about because of the change in the load requirements of the customers on Penn Water—Safe Harbor system on the one hand or at the three basins in our hydraulic analogy. The reason Holtwood Company is not in a position to do very much about the division of load is because its steam plant is normally operated at base load and does not vary its output. Furthermore, its frequency [2586] changers between its three-phase 60-cycle system and its three-phase 25-cycle system are seldom used, and when used have no manual control. Thirdly, because the only remaining 60-cycle capacity that Holtwood has of its own at Holtwood are two water wheel generators of very minor size compared to the installed hydroelectric capacity at Safe Harbor. It is for that reason that I felt confident in assuming that Holtwood could not control the flow on our water pipes, because it did not have any amount of additional water to inject into these pipes to change the division of flow.

Q. You have said in your answer that Holtwood is not in a position to do very much about the division of flows. When you say "isn't in a position to do very much" about it, that means to me that they can do something about it. Is that right? A. I don't think I ever said that Holtwood, in our earlier discussions, did not have any available capacity to control those loads. I think I carefully stated that under normal conditions Safe Harbor was the one major factor in the control of the flow of loads. I am quite sure I made that qualification.

Q. You were just speaking in terms of division of flows which Holtwood could control in relation to capacity. Did you mean generating capacity? A. I did.

Q. How about control in relation to switching and the like on the lines? [2587] A. I am endeavoring not to get too technical because the usual way of controlling power

flow over a network where you have three parallel paths is by the installation of a transformer bank with a phase angle control. There are no phase angle control transformers in our network. The only other way, therefore, that the division of load could be changed would be to open up a transmission circuit, and that would, of course, change the flow but it would usually give some concern to the customer whose circuit you open.

Q. Once the flow passes off Safe Harbor's facilities onto the facility of Holtwood it is only Holtwood that can exercise the latter control you have just named? A. That is correct. By "latter control" you mean opening up a circuit?

Q. Yes, changing flows by opening up a circuit. A. Yes.

. . .

[2637] Q. Taking the component parts of the contract you do not know from a technical and operating sense what the preamble means when it says that "York Company is engaged in the generation, distribution and sale of electrical power and energy." Is that right?

. . .

THE WITNESS: That is a different question. I think I can answer that one. From a technical and operating sense that gives me a very good picture of what the general operations of [2638] the York Company were expected to be.

By MR. GOLDBERG:

Q. Go ahead and tell us what that is. A. York Company is engaged in the generation, distribution, and sale of electric power and energy. I don't know what constitutes a sale, but to my mind that means that the York Company had certain operating responsibilities under that contract, or that had to be referred to and considered in connection with this contract from an operating point of view.

Q. What were the operating responsibilities it had?

A. It had to generate, transmit and provide electric services, as I view it from a technical point of view.

Q. All right. Now, what did you cover by the electric services? The words "power and energy"? A. Yes, to my mind that would include all of the attributes that we have been talking about relating to electric services.

Q. And the words "power and energy" were used to cover those attributes. Is that right? A. In this particular instance; yes.

Q. Yes. That is right, isn't it? A. In this particular instance.

Q. Yes. Now, go on to the next place where you find reference to "power and energy". [2639] A. I find it in the next paragraph of the recitation.

Q. Of Exhibit 71? A. That is right.

Q. What does it state there? A. "Metropolitan now supplies electrical power and energy to York Company at 2300 volts, at a point adjacent to York Company's Central Substation."

Q. What was your understanding of the words that you have read?

MR. MYSE: You mean from an operating standpoint again or general understanding?

MR. GOLDBERG: Technical and operating sense.

THE WITNESS: From an operating standpoint Metropolitan here only supplies electric power and energy. I take that to mean, and have taken that to mean, for the purposes in which I have used this contract in a technical and operating sense, that Metropolitan was going to supply certain electric services with all the attributes we have been discussing.

By MR. GOLDBERG:

Q. There, again—— A. To a point near York Company's Central sub-station.

Q. And there, again, the electric services, with all of the attributes you have named in connection with that phrase, are covered by the words "power and energy". Is that right? [2640] A. Yes, from an operating point of view they were.

Q. And from a technical point of view? A. Well, for the only technical reason that I would have any occasion to refer to this contract, yes.

Q. You referred to that contract for technical reasons —didn't you? A. Yes.

. . .

[2662] A. Energy is the result of voltage and current.

Q. How about frequency? Do we get that in there? A. Energy could be made available at a frequency. They are all closely interrelated, Mr. Goldberg. To say one can be present without the others is ignoring the practical aspects of the components themselves.

Q. You surprise me, Mr. Spaulding. You just have been telling us all of them are not present. A. They all don't have to be but they all have an interrelation.

Q. Now let's see if we can establish that interrelation firmly in my mind. You said that power is the result of energy and time? A. That is right.

Q. Is it correct to say that energy is the result of voltage and current, and to stop there? A. No.

Q. What else do I need? A. You have to take into consideration time there as well.

Q. I see. So is it correct for me to say energy is the result of voltage, current and time? A. Of course, there must be frequency present. There must be phase present.

. . .

[2697] Q. Is it a fact that under items H and I Consolidated is entitled to all savings effected by Penn Water's contracts with its Pennsylvania customers?

. . .

[2698] THE WITNESS: What do you mean by the "savings resulting from its Pennsylvania customers"?

By MR. GOLDBERG:

Q. Savings you referred to at transcript 183 and 184 in your direct testimony. A. May I see that, please?

Q. Yes. I was just going to furnish the references. I think also at 196 of your direct testimony and 209 of your direct testimony.

. . .

THE WITNESS: That is correct.

By MR. GOLDBERG:

Q. In other words, such savings as are secured through coordinated system planning and through interchange transactions are applied in reduction of the amounts Consolidated has to pay to Penn Water to make up the return Penn Water is assured of under items H and I—right? A. In part. The other savings result from operating savings of Baltimore Company themselves so that they result from the contracts taken as a whole.

Q. Am I correct in my understanding about the operations that Penn Water makes interchange sales and purchases of power and energy when the generation of energy at a lower [2699] cost plant on one system can be used to replace generation at a higher cost plant on another system?

. . .

THE WITNESS: Where we refer to interchange sales we are referring to the operating transactions between Penn Water on the one hand and Metropolitan on the other under the interchange provisions of Exhibit 72; and between Penn Water and Safe Harbor on the one hand and Pennsylvania Power and Light on the other, with respect to the interchange provisions of Exhibits 76 and 77; and between Penn Water on the one hand and Philadelphia Electric on the other, as respects the provisions of the interchange arrangement which has not yet been identified in this proceeding between Penn Water and Philadelphia Electric. The savings resulting from such interchange transactions were

referred to in the pages you mentioned or adjacent thereto in my direct testimony.

[2700] Q. That is interchange transactions take place when the generation of energy at a lower cost plant on one system can be used to replace generation at a higher cost plant on another system? A. That is correct.

[2717] Q. Will you explain what you meant at transcript 127 beginning at line 16 when you said, "The contractual arrangements for such interchange provide for an equitable division of the savings in operation expense between the buying and selling companies in such transactions"?

A. It is a little involved, but speaking generally first if you have a transaction of an interchange nature between two companies, as I have described here on page 127, line 16, and above that on the same page, such transactions are arranged whenever one company can generate a small increment of capacity and energy and other electric services at less additional cost than the other company can provide the same services.

TRIAL EXAMINER: How is that determined? How do you know when you can get it on that basis?

THE WITNESS: We have a load dispatcher in an office in Baltimore responsible for the operations of the two hydro companies. Expense of that office is divided between Penn Water on the one hand and Safe Harbor on the other.

That load dispatcher has before him at all times figures showing what it would cost to generate 20,000 kwh. or other increments of energy and to provide 20,000 k. w. or other increments of capacity on each of the several systems with which we are interconnected.

He also has before him, or can readily obtain, the corresponding costs for providing the same electric services from [2718] Consolidated Gas Electric Light and Power

Company of Baltimore and perhaps of the Potomac Electric Power Company in Washington.

He then can determine, and does determine, subject to supervision, of course, whether there would be a saving by having one of the several alternate sources provide an increment of electric service the next hour or the next day. Usually they don't try to schedule it further ahead than that.

If he finds that there is a saving in having one company provide such service over having another company provide the service, he is authorized to make the arrangements to obtain that electric service from the company having the lowest cost. By "lowest cost" I mean the cost of producing that increment of additional energy and capacity or other services.

Now, after he has authorized the transaction and it is carried out, the load dispatcher, together with the power economy group who has responsibility for the accounting of the dollars of cost in such transactions, will determine, first, how much of those services were actually received. And he would determine from the company providing those services what their costs were in providing that increment of service. He will also determine from the company receiving those services what their cost would have been if they had provided themselves that increment of service.

Now, it may be that on the one hand those services would have cost \$100 in one company and \$150 by the other company. [2719] Having gotten all those figures together, and as I testified in my direct testimony you divide the savings, the customer or the party who did provide the facilities will receive \$125 and those dollars will be accounted for as coming from, being debited to the company who did not spend any of the dollars but got the service.

. . .

[2720] By Mr. GOLDBERG:

Q. By third or fourth party transactions you mean non-member companies of the integrated system. Is that it?

A. No, I wouldn't say that, because I don't know what you mean by "integrated" system. But if it were a company other than the named party to one of the interchange transactions we have been referring to this afternoon.

Q. When you mentioned this load dispatcher who directs who is to supply the increment of service at various times, does he limit his concern solely to Safe Harbor, Penn Water and Consolidated, or does he extend his directions for supplying the increments of service to Philadelphia Electric, Pennsylvania Power and Light Company, Metropolitan Edison, and Potomac Electric Power Company?

A. The load dispatcher I was referring to as being responsible for the operations of Penn Water and Safe Harbor system contacts directly, and makes arrangements with, the corresponding load dispatcher of the Philadelphia Electric [2721] system, the Pennsylvania Power and Light system, and the Metropolitan Edison system.

If third-party transactions are to be provided or arranged for with another company to the north of one of the three I mentioned, then those arrangements are made between the Penn Water-Safe Harbor load dispatcher on the one hand and perhaps, as an example, the Philadelphia Electric load dispatcher on the other, and he in turn will make arrangements with the third party.

Q. The third party to the north are those New Jersey companies you mentioned yesterday. Is that it? A. That is right.

Q. How about Potomac Electric Power Company? Where do they fit into the picture? A. The Baltimore Company, Consolidated Gas Electric Light and Power Company of Baltimore, also has a load dispatcher, and it is his responsibility to know what the costs are on his own system, meaning Baltimore's system, and on the system of Potomac Electric Power Company. He makes whatever arrangements are to be made between Baltimore and Potomac Electric Power Company, because Penn Water and

Safe Harbor have no operating arrangements for such transactions with Potomac Electric Power Company.

TRIAL EXAMINER: This will not interrupt your cross-examination?

[2722] MR. GOLDBERG: No.

TRIAL EXAMINER: How does Holtwood-Safe Harbor load dispatcher in Baltimore know what the cost of energy would be if supplied by Consolidated if he doesn't know where Consolidated will get it?

THE WITNESS: He has to get that from Baltimore's load dispatcher and Baltimore's load dispatcher has to know that first.

TRIAL EXAMINER: He sits there and tries to figure out where he will get his energy for the next hour, or his services for the next hour?

THE WITNESS: That is right.

TRIAL EXAMINER: Now, then, if he does not know where Consolidated will get it, in other words, he has to use approximation, then talk with Consolidated's dispatcher to find out whether that approximation is correct or not. Is that right?

THE WITNESS: That is about right, sir. They are sitting at a desk with a telephone in front of them and using it almost continually. By "continually" I mean the very large part of each hour. They have before them figures which show right along what the costs are this minute, the next hour and the next hour and so on for at least 24 hours ahead.

TRIAL EXAMINER: Those cost figures, then are made up as they go along each day?

THE WITNESS: They are, and they are continually being exchanged. Probability is that right now all of these load [2723] dispatchers, and seven or eight may be involved, can tell you this minute what the costs are now

on each one of these systems, and they may change the costs in the middle of an hour if the load suddenly comes up by a thunderstorm.

TRIAL EXAMINER: They do not use a standard price good for that day all through the year?

THE WITNESS: No, it is an elaborate table filled in hour by hour. Of course, there are basic figures. I hesitate to complicate it, but let me take the Philadelphia Electric Company's system, for example. The system operator, or the load dispatcher, as I have termed him, of the Philadelphia Electric system knows tomorrow morning what generating units he expects to have running, and if those generating units are all running and loaded as he had expected them to be he knows what the cost of each unit would be.

Now, he also estimates what units, and how many units, he will need to meet an estimated load requirement for an hour or for a day.

If, due to weather conditions, or other unforeseen conditions, the load is higher or lower he could tell you now what the effect of an increment change would be on his system tomorrow at any hour you might ask him. To that extent there are some basic figures that do not change. But as to what the actual costs are, and they will depend on how many units are running and how much load you have on a unit, that is something [2724] he has to figure out as he goes along.

. . .

[2725] **Q.** Now, then, before the Penn Water and Safe Harbor load dispatcher calls up the Metropolitan Edison load dispatcher to request the delivery of a certain supply, does he communicate with Consolidated to get the Consolidated dispatcher's views on that? **A.** He will naturally communicate with the dispatchers of all these systems with which he has interchange arrangements [2726] in order to find out from what source it can be obtained most economically.

Q. Suppose the interchange supply were to be used for furnishing Consolidated's needs? Would the Penn Water load dispatcher communicate with the Consolidated load dispatcher to ascertain, or determine, the source from which he was going to secure the supplies? A. May I have the question again, please?

(Question read.)

THE WITNESS: Not necessarily. If the Penn Water-Safe Harbor load dispatcher advised Baltimore Company that he was in a position to obtain a specified amount of electric services the next hour, and knew from the information before him that the cost of such service would be less than Baltimore would have to expend in providing the same service, inasmuch as the service was going to Baltimore, and I presume we are still talking about interchange transactions, Baltimore would have naturally the right to say they didn't want it on the one hand, but they wouldn't be concerned with the name of the party from whom Penn Water might be going to get it on the other.

Q. In supplying Consolidated's requirements under Items "H" and "I" is Penn Water obligated to secure the supply from the cheapest possible source, at all times? A. It has a joint obligation with Baltimore Company to plan and operate the system in such a way that the result will be [2727] the minimum of cost to the system.

Q. Well— A. And it is therefore a joint obligation of Baltimore and Penn Water and Safe Harbor to do so, and therefore I think it is an obligation of Penn Water to assure itself, as well as assure Baltimore, that it did carry out the transactions in such a manner as the costs would be a minimum.

Q. And the interchange agreements then are part of the means of securing the maximum economy from the operations of the system and are so utilized. A. The interchange agreements make possible economies in the operation of the system which would not be possible without them.

Q. When you refer to the joint responsibility of Safe Harbor, Penn Water and Consolidated to operate the system to secure the greatest amount of benefits cost-wise and perhaps operation-wise as well, you are referring to the operating committee which is set up. Is that right? A. The operating committee is the group who carries out the operations to do that, yes.

Q. Is the operating committee in session every day? A. No, indeed.

Q. But if they are not in session every day, how is it carried on during that period of time when the operating committee is not in session? [2728] A. The operating committee have assistants who devote a larger part of their time to such matters, and the operating committee has also delegated a certain amount of such duties to a group known as the power economy group. That power economy group is made up of perhaps six or eight people, including certain clerical assistants, and the expenses of that office are borne one-third by Baltimore Company, one-third by Penn Water, and one-third by Safe Harbor, and the functions and duties and responsibilities of that group, the power economy group, are derived only from the operating committee so far as those duties relate to the contracts we have been discussing. And that power economy group in turn instructs at times, and informs at other times, the load dispatchers of the facts that they may need and have before them to actually perform the things that I have been discussing with you and the Examiner.

Q. Sooner or later, then, the functions of the operating committee and its assistants and the functions of the load dispatchers are correlated, and there is an exchange of information to carry out the operations of the system for maximum—— A. For maximum overall economy and maximum utilization of resources.

Q. And that applies to the operations in respect to Items "E", "F", and "G", "H" and "I", Exhibits 72, 73, 74, 75, 76, and 77, and the unidentified interchange

agreements you and I [2729] have discussed today. Is that right? A. I don't know whether that is taking in too much territory or not, but as long as it is limited to the joint responsibilities of the operating committee to provide the maximum economy it is naturally necessary to give consideration to all of the necessary operations required in connection with these contracts you have mentioned, and others, of Baltimore Company—with the Bethlehem Steel, with Potomac Electric Power Company, and many other contracts. But that does not mean that I, as a member of that operating committee, have any particular working knowledge or operating knowledge of the requirements under those contracts of Baltimore Company.

Q. However, you have a knowledge, or general knowledge, at least, of the operations and of the costs involved?

A. Yes. It is necessary to have that in order to know whether it is possible to carry out these interchange arrangements, to obtain the minimum of operating costs, or maximum of economy, within the limits of the provisions of those other contracts. Otherwise, I have no interest in them—

Q. Yes. A. —as a member of the operating committee.

Q. Yes, naturally it has to be within the provisions of the existing contracts—right? A. Yes.

. . .

[2735] Q. When you speak of Items H and I, and E, F, and G being interdependent, in what sense do you use the word "interdependent"? A. That they have to be taken together.

Q. In what sense do they have to be taken together—legally? A. That I don't know. I was speaking of it from an operating sense.

Q. From a physical sense. A. I think so, if by "physical" you mean from the operating point of view.

Q. Well, from an operating point of view how are they interdependent? A. The operations are carried out, and

can be carried out, as they are carried out, only because both of them are [2736] there, and we seldom, and by "we" I mean the operating people, think of one contract or the other contract, but think of them together in our operating practices, carried out as though, and only because, both of them are there. We make no distinction between one or the other except for the accounting of energy on the one hand and the preparation of the bills on the other as distinct from the operations under the two contracts.

Q. Would you say that they are interdependent in the sense that when Penn Water and Consolidated contracted under Items E, F, and G with Safe Harbor for Safe Harbor's entire output that Penn Water and Consolidated were then able to contract under Items H and I in such manner as to effect the complete coordinated utilization of the facilities of Penn Water, facilities and resources of Penn Water and Safe Harbor? A. I think you have to take them together in order to be able to obtain the operating benefits that are obtained. I don't know what the parties had in mind.

Q. I am interested in what you had in mind when you said "interdependent". A. I had in mind that you have to consider them together from an operating point of view. You cannot consider one separately from the other.

Q. Because you do not get complete coordination of the [2737] facilities and resources of Safe Harbor and Penn Water without consideration of Items H and I, and E, F, and G—is that it? A. In part, but also because you cannot determine whether electric services are coming from one or the other, under one of the other contracts or from one of the other plants and other facilities.

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[2757]

JOHN A. WALLS.

CROSS-EXAMINATION.

By MR. GOLDBERG:

[2776] Q. Mr. Walls, isn't it a fact that as a result of the review you have made of the exhibits described in your statement [2777] that in each of the years 1935 to 1945 inclusive, without exception, Safe Harbor represented to the SEC that Safe Harbor sells electric energy? A. Yes, sir.

Q. And isn't it a fact that it represented that such sales of electric energy are made to only two customers, namely, Consolidated and Penn Water under the agreements we know of in this proceeding as Items "E", "F" and "G"? A. Yes, sir.

Q. Isn't it a fact that in each of the years 1935 to 1945 inclusive, without exception, Safe Harbor represented to the Securities and Exchange Commission that its revenues are derived solely from the sale of electric energy which are made to Consolidated and Penn Water? A. I think so.

Q. Revenues from sales of electric energy, not these other operating revenues?

MR. SPARKS: Yes, but your question, I think, stated "Isn't it a fact that Safe Harbor represented that its revenues were solely from the sale of electric energy?"

By MR. GOLDBERG:

Q. Let me amend the statement to say that its revenues from the sales of electric energy were derived solely from sales of electric energy to Consolidated and Penn Water? A. That is a more correct statement.

[2778] Q. Isn't it a fact that throughout that period of time, 1935 to 1945, inclusive, Safe Harbor never suggested to the Securities and Exchange Commission that it sells

electric energy under any other contracts? A: That is the case so far as I know.

Q. Isn't it a fact that at no time from 1935 to 1945, inclusive, had Safe Harbor ever suggested that it sells electric energy jointly with Penn Water or any other Company?

THE WITNESS: I do not know of any unless there be an implication to that effect in the legal language in these exhibits.

By MR. GOLDBERG:

Q. From an engineering viewpoint you found no such implications, did you? A. I did not find any such.

[2797] Q. Now, as a result of your examination of the exhibits which you have referred to in your statement this morning, you know, do you not, that in each of the years 1935 to 1945, inclusive, without exception, Penn Water represented that it sells electric energy to Consolidated under Items H and I? A. Yes, sir, in these statements.

Q. And that it represented at all times during that period that it purchases electric energy from Safe Harbor under [2798] Items E, F, and G? A. Yes.

Q. And that at all times during that period Penn Water represented that it sells electric energy to Philadelphia Electric Company, Pennsylvania Power and Light Company, Metropolitan Edison Company, and Edison Light and Power Company?

THE WITNESS: I think so, but I don't recall at the moment whether that was for every year.

By MR. GOLDBERG:

Q. At least the exhibits will speak for themselves? A. Yes, sir.

Q. And as a result of your examination of the exhibits referred to in your statement this morning you know, do

you not, that it was never represented by Penn Water that jointly with Safe Harbor it sells electric energy to any customers. Is that right? A. Unless there was some legal implication to that effect.

Q. Otherwise you saw nothing to that effect? A. Correct.

. . . .

[2799] Q. And in your examination of the exhibits you saw no representations by Penn Water that it sells capacity and not electric energy to Consolidated under Items H and I. Isn't that right? A. As far as I remember, yes, sir.

Q. And you do not know of any statements filed by Penn Water with the S. E. C. in which it made contrary representations. Isn't that right? A. I don't recall them.

Q. And as in the case of Safe Harbor, Penn Water's representations were also representations to the Public and to prospective investors and present investors—right? A. I think that that is so.

. . . .

[2816] Q. I show you Exhibit 73, Mr. Walls. Is that exhibit framed in accepted nomenclature among engineers? A. Yes, sir, that would be understood by engineers, but it is not an accurate representation of the operating situation.

Q. Is it accepted expression when they speak about sale of electric power and energy in that agreement? A. It is accepted in the sense of being usual and there being no necessity to be more explicit, yes, sir.

Q. And it is accurate when used in Exhibit 73, isn't it? A. Sufficiently accurate for the purposes of the contract.

Q. It is sufficiently accurate in connection with any disputes which might arise under the contract—isn't that so? A. I don't know about that. I often find in contracts that the intent does not appear later on after investigation by lawyers to be the intent that I thought the contract was founded upon, so that disputes arise. What

disputes arise in connection with that contract I don't know.

Q. When it states, at page 3 of Exhibit 73 that PX, meaning Philadelphia Electric Company, may obtain electrical energy, what does it mean? A. It means electric supply if interpreted in the fashion [2817] I would interpret it.

Q. It means electric services? A. Yes, sir.

Q. And that is accepted nomenclature for describing electrical services, isn't it? A. That is accepted nomenclature for the purposes of a contract like this but it is not a fully accurate description.

Q. Mr. Walls, you know, as an engineer of many years' experience, that it is accepted nomenclature not only for purposes of contracts but for any other purposes you have ever heard engineers discuss the subject. Isn't that so? A. No, sir, I wouldn't say that.

Q. And you have used them as synonymously with "electric services"—right? A. I think that "power and energy" have often and even generally been used in contracts as synonymous with electric service, but not always. In the old days they generally referred to "power" without the word "energy."

Q. They were using them as encompassing the word "energy"—[2818] right? A. Yes, sir.

Q. Back there in 1920? A. Well, and earlier than that.

Q. Along in 1920 as well? A. Yes, sir. But I do not believe that electric service itself is synonymous with "power and energy." In other words, it may sound queer, but "power and energy" may be used sometimes as a substitute for electric service but "electric service" may convey a meaning that is more than that conveyed by "power and energy."

Q. Engineers use them interchangeably, power and energy used as synonymous with electric services by engi-

neers. Isn't that so? A. Yes, but very loosely. When used that way it may be incorrect.

Q. You use it that way yourself? A. Often, and expect to do so in the future.

Q. Other engineering associates in your company do that? A. Yes, sir, where there is no need to be more accurate.

Q. And in contracts there is need to be careful, isn't there? A. There is need to be careful, but there is not always need to be fully explicit.

Q. Although there is not need to be fully explicit, [2819] "power and energy" has been carefully used in the contracts of the company to cover what you are today referring to as electric services. Isn't that so? A. I think it has not been carefully used. I think it has been loosely used because it is a convention.

Q. Would you say that it is now necessary to revise your contracts? A. I shouldn't think so.

[2834] Q. In other words, you were negotiating for electric services, for example, under Exhibit 72, is that right? A. Yes, sir.

Q. And the electric services were described in the [2835] terms used in that agreement? A. Yes, sir.

Q. And that is the case in the other agreements which I have shown you; is that right? A. Yes, sir.

[2840] **GEORGE W. SPAULDING.**

CROSS-EXAMINATION (Continued).

By MR. GOLDBERG:

[2877] Q. Have you had an opportunity to check any of the matters I requested you to check, Mr. Spaulding, one of them being—did Penn Water submit a bill to Philadelphia Electric Company in behalf of Penn Water and Safe

Harbor? A. I find no evidence that a bill has been rendered to the Philadelphia Electric Company for firm power services at Coatesville which was rendered both by Penn Water and Safe Harbor.

I don't say there aren't any, but I have not been able to find any.

Q. The bills you are able to find appear to have been rendered in the name of Penn Water only to Philadelphia Electric Company. Is that right? A. That is correct.

. . .

[2880] Q. In other words, the terms of the agreements for firm power supply and interchange supply among the several systems that you have just mentioned are such as to permit the shifting of supply in the network to various load centers so that the cheapest possible source of generation is being used to meet the load requirements of the systems you have named—is that right? A. That is right.

. . .

Q. In other words, provision has been made for co-ordination of the operations of the systems you have named, namely, Safe Harbor system, the Consolidated system, the Penn Water system, Philadelphia Electric system, Pennsylvania Power and Light system, Metropolitan Edison system, and Pepco system. Is that right?

. . .

THE WITNESS: The several agreements which we have been referring to in the last several days, together with other [2881] agreements which have not been identified in these proceedings, permit coordinated operations of and between the parties you have named to the extent that transmission facilities permit.

. . .

[2893] Q. Well, do you know of any provisions in any of the agreements which have been identified in this proceeding, or received in evidence, which authorizes Penn Water to take Safe Harbor's share of the savings under Exhibits

76 and 77 and credit them wholly to Consolidated in connection with provisions [2894] of Items "H" and "I"? A. I don't think I do, but when Baltimore Company undertook, under "E", "F" and "G" and "H" and "I", to provide a specified return dollarwise with certain adjustments to Safe Harbor on the one hand and Penn Water on the other, those companies at that time gave up any opportunities to increase their earnings as the result of any economies within the company, or any economies of coordinated operation with others. As a result of those agreements, therefore, any savings that should properly result, and do result, from the equitable division of savings resulting from coordinated operations go to reduce the payments made by Baltimore Company to Safe Harbor on the one hand and to Penn Water on the other. Under "E", "F" and "G" Baltimore Company pays a specified dollar payment for the entitlements it receives under that contract. Baltimore does not get those entitlements, never expected to get those entitlements as such, nameiy, as electric services. In lieu of its entitlements of electric services it does receive the revenues obtained from the sale of electric services to which Baltimore Company is entitled under "E", "F" and "G".

A further accounting, and all further accounting, of savings or economies resulting from the operations of Safe Harbor on the one hand and Penn Water on the other, all go, accountingwise, to reduce the net revenues paid by Baltimore Company to Holtwood Company, that is, Penn Water, under the contract identified as [2895] "H" and "I".

Q. In other words, whatever savings there may be as a result of the coordinated operations go to reduce Consolidated's payments to Penn Water under Items "H" and "I", a contract to which Safe Harbor is not a party. Right?

A. It is not a named party, no, sir.

Q. And my statement is right? A. That is right.

Q. And part of these economies you say belong to Safe Harbor—right? A. I think they do.

Q. And though they belong to Safe Harbor they are used by Penn Water in an agreement to which Safe Harbor is not a party—right? A. They are so accounted for.

Q. They are so used—right? A. They are so accounted for.

Q. Do you make some distinction between them? A. I don't know whether there is a distinction.

Q. But none of these savings are in any way involved in the payments made under Items, "E", "F" and "G" by Consolidated and Penn Water. Is that right? A. Payments by Consolidated and Penn Water are entirely independent of services rendered.

[2896] These savings do not affect in any way the payments made by Baltimore and Penn Water to Safe Harbor under contract identified as "E", "F" and "G".

[2897] Q. The objective of the coordinated operations, as I understand it, is to use the cheapest source of supply to meet the requirements at various load centers—right? A. Generally, yes.

Q. And is that practice followed with respect to Exhibit 73, for example, the Coatesville power supply contract? A. Generally.

Q. And that— A. Yes, but let us be sure there is no misunderstanding about that. That has to do only with the total generation on the system and not the responsibilities of the respective parties to this overall interconnected system we have been talking about. The coordinated operations are one thing. The operating responsibilities are quite something else. So that when we talk about the savings resulting from coordinated operation we are talking about the savings resulting from the scheduled operations and not the savings resulting from the operating responsibilities under any single contract.

[2904] Q. When Exhibit 71 was entered into were Items E, F, and G changed in any way? A. I don't know, Mr. Goldberg, whether or not it was.

Q. Well, you know it is marked in this case. Look at it and tell me what was changed, if anything? A. I don't mean that anything in writing was changed, but I don't know whether the provisions of E, F, and G, or the operating responsibilities under E, F, and G, were changed when contract identified as 71 was entered into or not, with [2905] the approval of all parties.

Q. Exhibit 71 was entered into—do you know of any amendments entered into with respect to Items E, F, and G at that time? A. No, I am pretty sure there were none.

.

Q. What was done to Items E, F, and G, when Exhibit 73 was entered into? Amended, supplemented, revised?

A. There were no changes made when 73 was entered into.

Q. Or when 74 was entered into—right? A. That is correct, no changes in E, F, and G in writing as such.

Q. What does that—no changes in E, F, and G in writing as such mean? A. That is right.

Q. You mean there were no changes in writing that you know of? A. I don't know whether there was any change in the responsibilities of the parties or not. I think there must have been, without being a lawyer. E, F, and G was entered into in 1931, and there were certain entitlements to which Baltimore was entitled to on one hand and Penn Water entitled [2906] to on the other.

Then subsequent to that time, and as I recall it after the charter rights of Safe Harbor were extended by the Pennsylvania Commission in 1932, subsequent to that time the contract between Penn Water, Safe Harbor, and Edison Light and Power Company was entered into with the approval of Baltimore Company and Penn Water. I don't know from the legal point of view what changes took place in the contracts identified as E, F, and G, but certainly something took place right at that time. And again

when the contracts were entered into in 1933, I believe it was, with Coatesville, the contract identified as Exhibit 73, Safe Harbor was made a party to that contract, made a party to that contract with the written consent and approval of Baltimore Company.

Penn Water, of course, likewise, was a party. Certainly some change took place in the obligations and responsibilities of Safe Harbor under E, F, and G when it entered into those contracts.

Now, as an engineer, I don't know what the charges were, but it certainly changed the entitlements of the services as distinct from dollars under E, F, and G. Baltimore and Penn Water still were entitled to two-thirds and one-third, but certainly Baltimore did not expect to get, and did not get, as much services from Safe Harbor under E, F, and G, after Safe Harbor entered into the contracts identified as Exhibits [2907] 71, 73, and 76, and the Pennsylvania Railroad contract.

TRIAL EXAMINER: Where did Safe Harbor get that written consent from Consolidated entered as Exhibit 73?

THE WITNESS: Before—

TRIAL EXAMINER: Have we marked it for identification?

THE WITNESS: No.

TRIAL EXAMINER: This is something new, then? You are testifying to something which has not been testified to before? I do not recall it.

THE WITNESS: I think it has been referred to, Mr. Examiner, but the letters have not been identified.

MR. GOLDBERG: You took the words right out of my mouth, Mr. Examiner. I was about to request that written consent be brought in here.

TRIAL EXAMINER: Very well.

MR. GOLDBERG: Mr. Spaulding, will you provide us with Consolidated's consent, if it exists, to Exhibits 71, 72, 73, 74, 75, 134, 76 and 77?

THE WITNESS: How about the railroad contract. Of course, Safe Harbor was a party to the railroad contract. My recollection is that no written approval was necessary from Baltimore Company for Safe Harbor to enter into the railroad contract because Baltimore Company itself was a party thereto.

By MR. GOLDBERG:

Q. Do you have something in writing on Exhibit 10? [2908] A. No, there is nothing in writing, I mention that because—

Q. Is it your interpretation as to why there is nothing in writing? Is that right? A. I don't attempt to make an interpretation as to why there is nothing in writing. I explained that there was no letter because counsel for Baltimore Company and Penn Water felt that the fact that Baltimore Company and Penn Water were already a party to the contract, any formal approval was unnecessary. I remember that because I participated in those discussions.

Q. You have nothing in writing on that? A. No, it was agreed nothing in writing was necessary.

[2921] Q. Well, are the operations of Safe Harbor and Consolidated physically inseparable in the same way that you testified at transcript 195, that the operation of Penn Water and Safe Harbor to Baltimore Company are physically inseparable? A. No, there is a distinction between them.

Q. What is the distinction? A. The two hydro plants and the steam plant of Penn Water are operated as a single combined source of electric services, and it is impossible to distinguish between the services from one plant and the services from the other plant. By "plants" I

mean the hydro and steam plants of Penn Water on the one hand and Safe Harbor on the other.

You cannot determine whether the kilowatt comes from one [2922] plant or the other, or a kilowatt hour, or a K. V. A. comes from one plant or the other.

You can tell how much of each the two plants provide, but their operations are closely coordinated in order that full utilization may be made of the river flow and of the storage available largely above the Safe Harbor dam, but including such storage as is available below the Safe Harbor dam in the Holtwood pond.

[2923] Q. You say the operations of Consolidated are not as closely coordinated with those of Safe Harbor and Penn Water as are the operations of Safe Harbor and Penn Water—right? A. That is right.

Q. You say there is some difference of degree—right? A. That is right.

Q. Where does that difference of degree begin to take effect? A. It takes effect all through the operating responsibilities.

Q. You say that it is impossible to distinguish between the services being rendered by Safe Harbor hydro and the services from Penn Water's hydro and steam plant—right? A. Generally.

Q. Is it possible for you to distinguish between the services being rendered by Consolidated's steam plant and [2924] those being rendered by Penn Water and Safe Harbor hydro? A. Yes.

Q. How can you make that distinction? A. Well, it can be done and it is done.

Q. Can it be done at the time you have power coming up from Baltimore and generation at Safe Harbor? A. Yes.

Q. How do you do it? A. You know how much capacity and energy and other services are being generated from the two hydro plants on the combined system, and

you know what is being generated by the power resources of Baltimore on the other hand.

Q. You know that with respect to the coordination of the two hydros up there on the Susquehanna and steam plant at Holtwood—right?

THE WITNESS: May I have that question?

(Question read.)

THE WITNESS: Yes.

By MR. GOLDBERG:

Q. What is there which enables you to distinguish what is being rendered by Consolidated when there is generation at Safe Harbor but does not enable you to make the same distinction where there is generation at the Safe Harbor and Holtwood hydros and at the Holtwood steam plant?

A. May we refer to Exhibit No. 8?

[2925] Q. Yes. A. And looking at the upper right-hand diagram we see the electrical services provided by hydro, which includes the services provided from the Holtwood hydro plant to Penn Water and at Safe Harbor hydro plant at Safe Harbor. They are operated in the upper part of that curve, shown colored in green, in a manner to obtain the maximum use of the hydro capacity and the hydro energy. It is impossible to say what kilowatt, or what kilowatt hour of that green area, comes from Holtwood and what comes from Safe Harbor. In any hour it is easy to determine how much comes from each, but the way in which the river flow is used in the two plants, and the two plants operate in service, you have to take the operation of the two plants together in order to obtain the maximum utilization of the river flow.

If you take the section below the green area you find a portion of the curve which is indicated comes from steam source No. 3.

My testimony in connection with that exhibit indicated that that steam source is used to provide electric services required in that area.

Now, in that instance, although there may have been several combinations of boilers and turbo generators, and in fact there may have been such units in several plants, they are not inter-dependent on each other, and although it is not [2926] shown here as to which steam plant or steam source is fitted into each imaginary square of that area it could readily be done by knowing the relative incremental costs of those several combinations of boilers and turbo generators. So there is no inter-relation of the steam sources in that group although there is a very close inter-relation resulting from the very close operation and operating responsibilities of the two hydro plants in the green area.

. . .

[2945] Q. I show you now, Mr. Spaulding, the annual report of Pennsylvania Water and Power Company for the year ended December 31, 1945, to the Federal Power Commission on F. P. C. Form No. 1 and direct your attention to pages 512 and 513 of that report. At those pages does Penn Water report the sales of electric energy to anybody? A. In column (p) of page 513, Schedule 530, "Sales to Other Electric Utilities," there is reported according to the instructions of the Federal Power Commission certain kilowatt hour figures.

Q. To whom is it reported by Penn Water that they sell electric energy on pages 512 and 513? A. Well, there is a recording of kilowatt hours in this schedule of energy, as indicated by the items reported in column (p) to the Consolidated Gas Electric Light and Power Company of Baltimore to the Pennsylvania Power and Light Company to the Philadelphia Electric Company at Coatesville and [2946] to the Edison Power and Light Company at York. I don't know that it indicates an energy sale. It is a recording of energy in connection with this statement.

. . .

[2947] Q. And the sales to the other electric utilities are [2948] shown as being made to Consolidated of Baltimore,

Pennsylvania Power and Light Company, Philadelphia Electric Company, and Edison Light and Power Company—right? A. Yes. The entries on pages 512 and 513 are made in relation to the sales to those companies as an accounting matter.

Q. You mean an accountant made up pages 512 and 513? A. I think an accountant prepared the framework within which certain figures were entered.

Q. You mean an accountant for the Federal Power Commission? A. I don't know.

Q. Who is this accountant you referred to who prepared the framework? A. May I refer to instruction No. 4?

Q. On page what? A. 513. "The number of kilowatt hours sold should be the quantities shown by the bills rendered to the purchasers."

I want to point out that although kilowatt hour figures are shown for each of the four companies, they are not figures that appear on all of the bills rendered, and the figures entered in column (p), "Kilowatt hours", is merely an accounting by the companies of the energies produced, purchased, and so forth, in order to have a complete accounting on these pages and other subsequent and preceding pages of all of the energies which the companies must report.

Q. In other words, you are saying that the items are there [2949] reported at pages 512 and 513 in that form because the schedule requires the company to follow that form and it had no choice. Is that right? A. That is right.

Q. Now, then, it did exercise its choice, however, of explaining to the Commission, didn't it, that though it was including in column (p) certain amounts of kilowatt hours that they had certain meanings other than those which might be carried away from reading the schedule alone—isn't that so? A. Yes.

. . .

Q. Now, though Penn Water felt free to indicate how the schedule should be read at pages 512 and 513, did it say that it does not sell electric energy to the companies shown at page 512, namely, Consolidated of Baltimore, Pennsylvania Power and Light Company, Philadelphia Electric Company, and Edison Light [2950] and Power Company?

. . .

THE WITNESS: As respects Pennsylvania Power and Light Company, Philadelphia Electric Company and Edison Light and Power Company it does not say it did not sell electric energy. There certainly is the implication they did not sell electric energy to Baltimore Company.

. . .

[2952] Q. Now, then, it does appear, doesn't it, from the first note on page 513-a that Pennsylvania Water and Power Company describes its customers in Pennsylvania, namely Pennsylvania Power and Light Company, Philadelphia Electric Company and Edison Light and Power Company as "its other (firm) customers"?

. . .

THE WITNESS: I think that is a general statement of what is recorded here.

. . .

[2953] Q. Well, look at it, Mr. Spaulding. Look at those pages and tell me if you see anything there and what it is about a representation that the customers I have named are the joint customers of Safe Harbor and Penn Water? A. I don't know whether there are any implications in that or not. I don't see any.

Q. You see nothing expressed there to that effect, isn't that so? A. There is no specific reference to it here.

Q. As a matter of fact, there is an express reference there that Pennsylvania Power and Light Company, Philadelphia Electric Company, and Edison Light and Power Company are Penn Water's firm customers. Isn't that so? A. Perhaps.

Q. No "perhaps" about it, Mr. Spaulding. That is the case, isn't it? A. I don't know what the implication of that is.

[2954] Q. I am not talking about implications. I am talking about express representations.

You just look at the first page of 513-a and tell me if you find anything in there which enables you to disagree with my statement? I will have my statement read to you.

TRIAL EXAMINER: Read the statement, please?

(Statement read.)

THE WITNESS: Yes.

By MR. GOLDBERG:

Q. Now, if they were the joint customers of Penn Water and Safe Harbor, don't you think Penn Water would have said so? A. I don't know.

Q. You participated in the preparation of that report, didn't you? A. I did.

Q. Why didn't you say so? A. Because this statement is not all mine.

Q. Who wrote that statement? A. It is the combination of my suggestions and lawyers'.

Q. And you didn't suggest, did you, that it should be represented that the Pennsylvania customers were the joint customers of Penn Water and Safe Harbor—isn't that so? A. I wouldn't say that.

Q. Did you represent they should be so described? [2955] A. I don't remember.

Q. If you had suggested that would your suggestions have been rejected? A. I don't know.

Q. Did you make the suggestion? A. I don't recall.

Q. How long ago was that? A. About six months.

Q. Six months ago did you conceive of Pennsylvania Power and Light Company, Philadelphia Electric Company, and Edison Light and Power Company as the joint customers of Safe Harbor and Penn Water? A. Certainly.

Q. Yet you didn't so state, did you? A. I did not so state.

Q. In a report which you were signing as representing the accurate facts. Is that right?

• • •

A. I think so.

Q. And in representing that they were the facts you [2956] did not represent that the Pennsylvania customers were the joint customers of Safe Harbor and Penn Water—right? A. It doesn't state here that they were joint customers.

Q. And that means you did not make such a representation. A. That is right.

Q. Even though at the time you were preparing the report you state you conceived of them as the joint customers of Safe Harbor and Penn Water—right? A. When you say, "Conceived of them", the idea is that—

Q. You looked upon them. A. Right.

Q. You do know that you signed that report, don't you? A. I do.

Q. And in signing that report, Mr. Spaulding, you said to the Federal Power Commission that you were making an oath as the vice-president of Pennsylvania Water and Power Company that you had examined the report, that you believed all statements of fact contained in the report are true and that the report is a correct statement of the business and affairs of Penn Water with respect to each and every matter set forth in the report during the period from and including January 1, 1945 to December 31, 1945—right? A. That is right.

• • •

[2962] Q. • • • Now, then, we know, don't we, Mr. Spaulding, that Safe Harbor did not report that it had made any sales of electric energy to Pennsylvania Power and Light Company, Philadelphia Electric Company, and Edison Light and Power Company during the year 1945. Isn't that so? [2963] A. The Safe Harbor report to the Federal Power Commission for the year ending December 31, 1945, does not record any sales to other electric utilities, other than to Baltimore and Penn Water.

Q. Directing your attention to page 524 of Penn Water's report on F. P. C. No. 1 for the year ended December 31, 1945, do we find the report by Penn Water of interchange transactions? A. There are recorded transactions in the schedule "interchange power" appearing on page 524, of Penn Water's report to the Federal Power Commission for the year 1945.

Q. And the interchange transactions are reported as having taken place with what companies? A. Philadelphia Electric Company, Pennsylvania Power and Light Company, Metropolitan Edison Company.

Q. Are they shown as interchange transactions in any way with Safe Harbor? A. No.

Q. As a matter of fact, if you turn to page 524, Safe Harbor's report for 1945, you find they report no interchange power transactions—right? A. That is correct.

Q. So we can tie this into discussions we had at an earlier date, firm power sales reported at pages 512 and 513 to the Pennsylvania customers in 1945 were made under Exhibits [2964] 71, 73, and 76. Is that right? A. Yes, if you include the amendments and supplements to those contracts you just referred to.

Q. You mean Exhibits 74, 75 and 76. Is that right? A. That is correct.

[2965] Q. And the interchange transactions reported by Penn Water, which we have just referred to, were made under Exhibits 77, 71 and 134—is that right? A. No, they were not made under 71 with Edison Light and Power. They were made under agreement between Metropolitan Edison and Penn Water dated March 11, 1931.

Q. That is the one we have not yet identified in the record as an exhibit—right? A. That is right.

We have not, of course, referred to the railroad contract but such accounting in connection with the railroad contract is recorded in the annual reports.

Q. With reference to the sales to the railroad, that is shown on page 514 of the report, isn't it? By "report" I

mean Penn Water's report to the FPC for the year ended December 31, 1945, on form No. 1. A. That is correct. Such accounting is shown on Schedule 532 "Sales to Railroads and Railways."

Q. And in this report Safe Harbor shows that Schedule with nothing in it—right? A. That is right.

Q. Penn Water reports at pages 522 and 523 of its 1945 report, "Purchases", and it reports those purchases as being made from Safe Harbor—right? A. It does.

. . .

[3061] Q. Referring to Exhibit No. 9, what portion of the \$3,531,520, shown for the year 1944, was paid to Safe Harbor as its share of what you have referred to as the joint services rendered to the firm power customers in Pennsylvania? A. None of it directly.

Q. What portion was paid indirectly? A. I don't know.

Q. Do you know whether any portion was paid indirectly? A. Yes, I know that some of it was. I don't know just how much.

[3062] Q. Was it paid to Safe Harbor as a share of its revenues resulting from the joint services to the Pennsylvania customers?

. . .

THE WITNESS: Not as such.

By MR. GOLDBERG:

Q. As a matter of fact, it was paid to Safe Harbor under Items "E", "F" and "G", wasn't it, by Penn Water?

A. Either by Penn Water or by Baltimore Company.

Q. Referring to Exhibit No. 17, which is the Safe Harbor bill to Holtwood for the year 1944, and to Baltimore Company, what amount is shown as the amount Holtwood Company is to pay to Safe Harbor? A. For the year 1944 Penn Water paid Safe Harbor under "E", "F" and "G" \$1,214,553.53.

Q. Was that amount part of the \$3,531,520 shown on Exhibit No. 9? A. It was not earmarked as such.

Q. In other words, if this \$1,214,553 was a part of the \$3,531,520 it was not paid to Safe Harbor as a share in the revenues resulting from services rendered to the Pennsylvania customers? A. I don't know whether it was or not, but not as such.

Q. But was used by Penn Water to meet its obligations to Safe Harbor under Items "E", "F" and "G", isn't that so? [3063] A. Possibly so.

Q. So that if the \$1,214,553 were a part of the \$3,531,520, the utilization of the \$1,214,000 by Penn Water to meet its obligations to Safe Harbor is in the same category as the utilization by Penn Water of the revenues it received from Conowingo to pay any other obligations that Penn Water may have. Isn't that so? A. I don't know whether one is a prior payment of the other or not, prior obligation for payment or not.

Q. Well, the \$3,531,520 and the payments received from Conowingo constitute revenues to Penn Water—right? A. Among others, yes.

Q. Now, then, if the payment made by Conowingo—incidentally, what is the payment in dollars made by Conowingo to Penn Water—do you know?

. . .

MR. GOLDBERG: \$133,750. I see it on Exhibit 18.

By MR. GOLDBERG:

Q. Is that right? A. That is right.

Q. If we added the \$133,750 to the \$3,531,520 shown on Exhibit 9 we would have a total of \$3,665,270. Does that sound right to you? A. Sounds about right.

Q. Now, then, that would represent revenues available to [3064] Penn Water to meet its obligations—right? A. Those revenues with others, yes.

Q. And it could use the \$133,750 to meet its obligation to Safe Harbor under Items "E", "F" and "G", couldn't it? A. So far as I know.

Q. And that is what you mean by Safe Harbor receiving indirectly revenues— A. I don't know whether any other obligations or legal responsibilities are involved, but generally that is what I had in mind.

Q. That is what you had in mind when you said that Safe Harbor was receiving indirectly part of the revenues from the Pennsylvania customers, because it is used in the manner, it may be used in the manner, we have discussed. Is that right? A. That is right.

Q. In other words, it can be said that I receive part of my salary from you indirectly. Isn't that so? A. That is so.

Q. You pay taxes to the United States Government, don't you? A. Yes.

Q. And the United States Government pays my salary? A. I don't know. I assume so.

Q. I assume so, too. But it may be said that indirectly you pay my salary, in part at least. Isn't that so? [3065] A. Is that a question?

Q. Yes. A. It might be so said.

Q. Nevertheless, you and I are not rendering any joint services that you know of, is that right? A. It hasn't appeared so.

Q. Does Safe Harbor render services for which it receives no reimbursement? A. It renders service for which it receives no reimbursement as such.

Q. Those services it renders to the Pennsylvania customers, Philadelphia Electric, Pennsylvania Power and Light Company, and Metropolitan Edison Company? A. I don't think it renders any service to Metropolitan Edison Company but it renders service to Pennsylvania Railroad. Of course, we have that.

. . .

[3067] Q. When you say Safe Harbor can only perform its obligations to the Pennsylvania customers jointly with Penn Water, do you mean by that statement that Safe Harbor can't make delivery without utilizing Penn Water's

facilities? A. Under the present contract they could not unless some other arrangements were made.

Q. In other words, you see joint service because Safe Harbor must rely on Penn Water's facilities to make delivery. Is that it? A. That is one element of joint service, yes.

. . .

[3092] Q. At transcript 193, beginning with line 4, you testified that Consolidated "Has the assurance for a long period, extending to 1980, of the advantages and certainty of a large source of hydro service which is closely coordinated with its own steam resources, and offering the opportunity to achieve the maximum economy of system operations." You so testified, did you not? A. I did.

Q. And, conversely, Penn Water has the assurance for a long period, extending to 1980, of the advantages and certainty of guaranteed earnings? A. I assume so, as long as the contract remains in effect.

. . .

[3101] Q. Consolidated has a contract obligation under items H and I to supply that steam backup—is that right? A. That is correct, and at the request of Penn Water.

Q. During such times as Holtwood would have to resort to Baltimore for a supply to meet the Pennsylvania requirements I have named in the preceding questions, and Baltimore was entitled to receive part of Safe Harbor's hydro-electric output under items E, F, and G, to avoid the necessity of having the electric energy from Safe Harbor go down to Baltimore and then back up to Holtwood it is merely diverted from Safe Harbor to Holtwood. Isn't that the way it works?

MR. SPARKS: May we have the question, please?

THE WITNESS: Before the question is read may I ask what these Pennsylvania customers are?

By MR. GOLDBERG:

Q. Philadelphia Electric, Metropolitan Edison, Pennsylvania Power and Light, and the State of Pennsylvania

load of the Pennsylvania Railroad? A. You included Pennsylvania Power and Light?

[3102] Q. Yes.

THE WITNESS: That is not the whole story.

By MR. GOLDBERG:

Q. Is that part of the story? A. I don't know. First of all, the requirements of these Pennsylvania customers to which you referred are in part the joint responsibility of Penn Water and Safe Harbor. I do not know what part of those responsibilities are Safe Harbor's or what part are Penn Water's so that I cannot determine how much Penn Water must obtain from Baltimore under your assumption that it would receive such services from Baltimore only in order that it might meet its responsibilities in part alone and in part joint to these Pennsylvania customers.

[3104] Q. All right. Are there times when Consolidated's entitlement under items E, F, and G is used to supply the requirements of the Pennsylvania customers?

[3105] THE WITNESS: The entitlements were arbitrarily determined where it was recognized they would have no significance as such in relation to the actual services rendered, and I don't believe I can answer your question categorically except to say that at times Safe Harbor does have an operating responsibility to the Pennsylvania Railroad, in your example, and as a result of that operating responsibility does not have left available for delivery to Baltimore as much as it would otherwise have.

Q. What it would otherwise have delivered to Baltimore is diverted to take care of the requirements of the Pennsylvania Railroad, for example. Is that right? A. It isn't diverted.

Q. It isn't sent down—— A. It is used for that purpose by Safe Harbor and Penn Water jointly.

Q. It isn't delivered down to Consolidated? A. That is right.

Q. If it were delivered down to Consolidated, had Safe Harbor and Penn Water needed it to meet the Pennsylvania requirements, that would only mean Baltimore would have to send [3106] it right back again. Isn't that so? A. Perhaps.

Q. So instead of going through all that they just don't send it down to Baltimore and use it up there in Pennsylvania. Isn't that it? A. I don't know.

Q. You just told us that there are times when instead of sending the electric energy to Consolidated in Baltimore it is used to meet the requirements of the Pennsylvania customers. Right? A. No, I don't think I said that.

Q. I just don't hear; then. A. Safe Harbor has a certain amount of electric services. Baltimore, under the contract, is entitled to two-thirds of those services. Safe Harbor has other operating responsibilities other than those referred to and covered by Exhibits "E", "F" and "G". To the extent that Safe Harbor uses electric services to meet its obligations to the Pennsylvania Railroad or other Pennsylvania customers there is that much less electric services available to Baltimore Company.

. . .

[3108] Q. And they never have existed because under the operating arrangements when Safe Harbor or Penn Water need Consolidated's entitlements to meet the Pennsylvania requirements, instead of the electric energy being delivered to Consolidated it is utilized up in Pennsylvania? A. No, that is not right, because Baltimore doesn't have available to it anywhere near the same electric services, [3109] measured in services, that it had in 1931. It hasn't as many services because of the operating responsibilities assumed by Safe Harbor in entering into these other contracts.

Baltimore's entitlement under "E", "F" and "G" has been converted from services into dollars which it receives under contract identified as "H" and "I", or rather as accounted for under the contract identified as "H" and "I", being those revenues received for the electric services to which Baltimore Company was originally entitled but to which it does not now receive and cannot receive so long as Safe Harbor meets its contractual obligations, and by that I mean its operating responsibilities.

Q. You mean that when Consolidated gave its consent to the agreements which were made with the Pennsylvania customers— A. Including the Pennsylvania Railroad.

Q. —it thereby authorized the diversion of its entitlements to Pennsylvania? A. Not from a contractual responsibility point of view. I don't know what it did contractually from a legal point of view.

Q. What did it do from an operating point of view? A. From an operating point of view Safe Harbor undertook additional operating responsibilities not theretofore assumed by it, and thereby had less electric services available to Baltimore Company under the contract identified as "E", "F" and "G".

[3110] Q. When Baltimore approved the consummation of the contracts with the Pennsylvania customers it thereby, from an operating point of view, permitted the utilization of its electric service entitlements in Pennsylvania to meet the requirements of the Pennsylvania customers. Isn't that so? A. I don't know what you mean by "permitted." It authorized it.

Q. You say it authorized it? A. Yes.

Q. With that substitution for my "permitted" you would say "Yes"? A. Let me go back to the question before I answer.

MR. GOLDBERG: All right."

(Question read.)

THE WITNESS: Well, it authorized Safe Harbor to undertake these additional operating responsibilities know-

ing full well that that included an authorization for the use by Safe Harbor in meeting those responsibilities of services which theretofore had been available to Baltimore Company either under "E", "F" and "G" or under "H" and "I".

. . .

[3133] Q. And have you always considered that those operating responsibilities that Safe Harbor had were joint operating responsibilities? A. That is right, I have considered them joint operating responsibilities.

Q. And when you have considered them as joint operating responsibilities you mean joint operating responsibilities of Penn Water and Safe Harbor—right? A. That is correct.

Q. And when you have considered them as the joint [3134] operating responsibilities of Penn Water and Safe Harbor, has it been your thought, your opinion, that Safe Harbor is responsible for supplying all of the requirements in the event Penn Water does not supply them? A. I don't think I ever had a definite opinion on that, and probably because there has only been one situation that I can think of when Penn Water was unable to furnish electric services to anyone. That was during the 1936 flood when Penn Water had to shut down, or rather when the elements shut down Penn Water's hydro and steam plants, and at that time Safe Harbor was the only company in a position to supply or to render electric services to these Pennsylvania customers, but I don't think even then that in retrospect I had any opinion as to whether they did then or would now have any particular portion of the operating responsibilities.

. . .

[3206] Q. As an engineer fully informed as to the operations of Safe Harbor under its contracts, fully aware, as you have stated, of the distinction between selling electric energy and selling electric services, you nevertheless found it entirely appropriate in the Safe Harbor proceeding to

describe the revenues received by Safe Harbor under the contract we know in this proceeding as items E, F, and G as "Revenue from energy sales". Isn't that right?

THE WITNESS: I did so state it, and I did not qualify it, although I was fully aware of the distinction between energy and electric services.

Q. Did you mean "Yes"? A. I don't know.

[3207] Q. Is the answer "Yes"? A. I think so.

Q. I want you to be sure, Mr. Spaulding. I don't want you to say that you testified "Yes" when you did not intend to. You seem to have some doubt. Is it correct to say that you can answer that question "Yes"? [3208] A. Let me have it again, please?

(Question read.)

THE WITNESS: Apparently I did at that time.

By MR. GOLDBERG:

Q. Then your answer is "Yes"? A. Yes, it is.

[3225] Q. Did Safe Harbor provide special facilities in connection with the operation of the Exhibits 76 and 77? A. Yes.

Q. Are they jointly used? A. I think they are jointly used by all three parties to those contracts.

Q. Can it be said any of them were provided for the specific use of Pennsylvania Power and Light Company? [3226] A. No, I do not think so, but they were provided specifically in connection with the services and operating responsibilities to the Pennsylvania Power and Light Company.

Q. Had those facilities been provided in connection with Exhibit 136? A. I do not think they were.

Q. Generally what kinds of facilities were they? A. Transmission facilities in a broad sense.

Q. What is that? A. In a broad sense, switches, breakers, high tension equipment and controls, transmission lines and the like.

Q. Weren't they required in connection with the operation of Exhibit 136? A. I don't think there were any provided by Safe Harbor until after the execution of Exhibit 76 and after 76 went into effect.

Q. Would they have been required in connection with Exhibits 76 and 77, even if Safe Harbor were not a party to the agreement? A. I don't know.

Q. Could the electric ~~services~~ be rendered to Pennsylvania Power and Light Company that are called for under Exhibits 76 and 77 without the facilities installed by Safe Harbor? A. I don't know. I don't think so.

[3227] Q. Because those facilities are required in connection with the supply of energy which originates in Safe Harbor that is used to render the electric services to Pennsylvania Power and Light—is that right? A. In connection with electric services rendered by Safe Harbor and supplied by Safe Harbor in that connection that is right.

Q. That is in connection with electric services which have to go through the Safe Harbor facilities, whether they originate at Safe Harbor or originate at Baltimore or Potomac Electric Power Company?

THE WITNESS: I am sorry. What facilities are we talking about here now?

By MR. GOLDBERG:

Q. The ones you said were provided after Exhibit 76 was consummated? A. Then that is correct.

[3229] By MR. GOLDBERG:

Q. Based upon the discussion we have been having so far this morning would it be fair to say that when you said that the special facilities were in part for joint-use

that your use of the word "joint" did not depend upon Safe Harbor having any operating obligations or responsibilities in connection with the rendering or supplying of electric services?

THE WITNESS: That is correct.

[3255] Q. No, I am talking about Safe Harbor agreeing to the adjustments shown in Exhibits 18 and 19 for 1944 and 1945.

MR. SPARKS: Relating to the \$9,000 odd dollar item now?

MR. GOLDBERG: That is right. Item "X".

THE WITNESS: No, Safe Harbor was not consulted in the matter.

By MR. GOLDBERG:

Q. They don't have to be consulted? A. Not as respects—

Q. Items H and I? A. H and I under normal conditions.

[3257] Q. Referring to Exhibit 17 you have stated, however, that it does not show a breakdown of costs of service rendered by Safe Harbor to the various persons you say received service from Safe Harbor. Is that right? A. That is right, and, of course, in referring to the expenses on the one hand and the "return" on the other, these exhibits show such items in relation only to the investments made by the respective companies.

Q. You mean Exhibit 17, for instance, shows the investments of Safe Harbor, 18 or 19 show the investments of Penn Water involved? A. They don't show the investment but the expenses and return relating to those investments.

Q. Right. Those are all the investments involved in rendering electric service? A. No, that is not right.

Q. What investments are left out? A. In 18 and 19 the investments are not shown under paragraphs A and B, but only the contractual returns, in a general sense, for those investments. But again we are only referring to revenues, and there are other investments that have been made by Penn Water which were excluded in the determination of the amounts shown in paragraphs A and B.

Q. Were they excluded from paragraphs C, D, E, F, H and [3258] X? A. The expenses incurred in connection with those facilities, to the extent there may be expenses incurred, are included in paragraph "C". They do not affect the items shown in paragraphs "D" and "E", but they do have an effect on paragraph "F".

Q. What investments of Penn Water did you have reference to when you said "certain investments of Penn Water are not included in the Exhibits 18 and 19"? A. There are quite a few of them. I will endeavor to refer to a few. Certain investments in property held for future use, certain investments made following the 1936 flood which were made to strengthen certain structures as protection against the elements more severe than were experienced in 1936, and there were several other major items that I don't recall right now, but I remember there were such.

Q. With respect to the investments which were made to strengthen structures in connection with the 1936 flood, were those capital investments or were they non-capital investments? A. They were capital investments.

Q. When you say that they are excluded, are they the types of investments upon which Penn Water, you feel, is entitled to earn a return? [3259] A. Definitely.

Q. And you say it is not earning a return on the investments it made in 1936 to strengthen the structures? A. I do not care to characterize it that way. I will say that it is not included in the basis on which a specified return is computed for the purpose of deriving the amounts shown in paragraphs A and B of Exhibits 18 and 19.

Q. Why aren't they included? Is somebody preventing Penn Water from including them? A. I didn't understand.

Q. Why aren't they included? Is somebody preventing Penn Water from including them? A. They were the results of negotiations between Baltimore Company and Penn Water.

[3260] Q. You mean as a result of negotiations between Baltimore Company and Penn Water it was decided not to include the investments made in strengthening structures as a result of the 1936 flood? A. That is correct.

Q. How about this investment in property held for future use. Is that excluded because of an agreement between Penn Water and Consolidated? A. No, sir. Penn Water has never included it in the computation of these amounts, have not included those items that I referred to as not being included. That decision was not arrived at because of any disagreement. Penn Water never to date has urged their inclusion.

Q. I see. But Penn Water is urging their inclusion now, if I understand your testimony. A. No, sir. I say that, in my opinion they should be included in the determination of costs, but that I believe Penn Water has been proper in not including them as a basis for the revenues in connection with the formula set out in the contract identified as H and I.

Q. But if they are included as costs of service, that changes the revenues, does it not? A. It would.

Q. Yes.

Are these other investments that you cannot recall right [3261] now in the same category, Penn Water has of its own volition never insisted upon their inclusion? A. No, I think that those decisions were made as a result of compromise. One I do recall now, an investment made by Penn Water in connection with the installation of Cottrell Dust Precipitators at the Holtwood steam plant. In Penn Water's judgment the installation of those facilities were most essential.

Q. But as a result—— A. Baltimore Company disagreed. A compromise was arrived at whereby Baltimore is now paying, or rather that one-half of such investment has been included in the basis for deriving the figures shown under paragraph (b) of Exhibits 18 and 19.

Q. So that it is your statement that with respect to the bill that Holtwood renders to Consolidated, the revenues there shown are not computed on all investments that Penn Water has made, meaning those investments you have described? A. And others of similar nature which I don't remember.

. . .

[3313] Q. Well, you said that the original reason for making Safe Harbor a party to Exhibit 71 was to provide that the capacity and energy of Safe Harbor, to which the Holtwood Company was entitled on the one hand and received and used on the other hand, would be available in that contract to Edison Light and Power Company. What I am unable to fathom is why it was necessary to make Safe Harbor a party to accomplish that feature. A. I don't know why Safe Harbor had to be a party. I [3314] know that it was made a party.

. . .

Q. I want to know if what was sought to be accomplished by including Safe Harbor could not as well have been accomplished even if Safe Harbor had been omitted? A. I think it might have been accomplished practically but the operating responsibilities would not necessarily have been the same.

Q. You mean this: That although it could have been accomplished there would not have been, in your view of it, any responsibility on Safe Harbor to Edison Light and Power Company? [3315] A. That is right, and I think that that has to be predicated on the assumption that Penn Water could have had sufficient electric services available to meet the requirements of Edison.

. . .

[3317] Q. Now, then, how did making Safe Harbor a party to Exhibit 71 make it any more certain that the capacity and energy of Safe Harbor which Holtwood receives and uses would be available under Exhibit 71? A. Well, by making Safe Harbor a party to Exhibit 71 Edison Light and Power Company has the assurance that Safe Harbor will perform these services jointly with Penn Water, and if Safe Harbor were not a party York wouldn't know whether it was going to or not.

Q. Well, if Safe Harbor were not a party—withdraw that.

By making Safe Harbor a party does that enable Safe Harbor to assure Edison Light and Power Company that the energy which Holtwood Company receives from Safe Harbor will be available under Exhibit 71? A. I think it does.

Q. How? What control does Safe Harbor have over what Holtwood does with the electric energy received by Holtwood? A. I don't think it has any control over what Holtwood does, but it undertakes an operating responsibility with Penn [3318] Water to provide electric services to York. York can now look to both companies.

TRIAL EXAMINER: Do you know whether York insisted that Safe Harbor be made a party to the contract?

THE WITNESS: I do not know whether they insisted or not, sir.

By MR. GOLDBERG:

Q. Whose idea was it that Safe Harbor be included? A. I do not know that.

[3323] Q. Why should there be any difference simply because you take somebody's name out of a contract? A. But you change the operating responsibilities.

Q. You say that Safe Harbor right now has an operating responsibility to Philadelphia Electric and Pennsylvania Power and Light Company. Right? A. They do, and by "they" I mean Safe Harbor does have operating responsibilities to those parties.

[3324] Q. Now, then, with respect to your second reason on page 239, which was with respect to Safe Harbor's right to sell and distribute electric energy at wholesale in York County, did you mean by that that it was believed that Safe Harbor did not have the authority to sell electric energy in York County? [3325] A. That is getting into a legal matter.

Q. I want just your understanding of it. A. All right. If I may give my understanding in non-technical language. In 1931 it is my understanding that Safe Harbor had been limited by the Pennsylvania Commission, the Pennsylvania Public Service Commission, to the extent that it might sell—and I use the word "sell" as I understand it was used—electric services to Penn Water and to Baltimore Company, and further limited the extent that such services could be resold by Penn Water only to its then existing customers. At that time its only existing customers were the Edison Light and Power Company of York, Pennsylvania Power and Light Company at Lancaster, and I think by that time the Company at Coatesville was owned and operated by Philadelphia Electric. I am not sure of that.

Subsequent to 1932, or possibly during the latter part of that year, a request was made to have the latter restriction, namely that electric services could only be resold by Penn Water to its then existing customers, extended or expanded in order that Safe Harbor might sell direct to customers other than Baltimore and Penn Water, and I don't recall there was any limitation on the customers. Yes, there was. However, I don't recall what that limitation was. I know that it specifically was permitted to sell

directly to the Pennsylvania Railroad in Manor Township, and I am not sure it was [3326] limited to that township but I know the permission extended to that township. Permission was also granted to sell directly to the companies operating in Lancaster, York and Chester counties, and I don't remember whether the names of the companies were specified or not.

I was referring to that action in my answer on page 239.

I think I should conclude that where I said "approvals were granted" they were granted by the Pennsylvania Utility Commission.

Q. Somebody wanted Safe Harbor included in those contracts, Exhibits 71, 73 and 75—right? A. More specifically Exhibit identified as No. 10.

Q. Somebody wanted Safe Harbor included in Exhibit 10—right? A. I think that is right.

Q. Who was that somebody? A. The Pennsylvania Railroad Company.

Q. Who wanted Safe Harbor included in Exhibit 71? A. I don't recall whether anybody wanted it, but I suppose they did. I don't recall.

Q. How about Exhibit 73 and Exhibit 76? A. At the time the permission was granted to extend its rights, if that is the proper expression, I know that the hearings before the Pennsylvania Commission were largely relating to Exhibit 10 and to Exhibit No. 139. There may have [3327] been other matters discussed, but they related largely to that, and it was around Exhibit 10 or the Pennsylvania Railroad contract that most of the testimony related, but the advantages of being able to sell electric services by Safe Harbor directly to others was fully recognized, first, as it would permit a reduction in total taxes paid, as is referred to also on page 239, and further it was recognized that by permitting electric services of Safe Harbor to be sold directly by Safe Harbor or resold by Penn Water to others, and I am referring now to Exhibit 139, there would result additional savings from economy operations